

BUILDING A
MEDICAL TERMINOLOGY
FOUNDATION
SECOND EDITION



KIMBERLEE CARTER MARIE RUTHERFORD CONNIE STEVENS

apical apoptosis appendicitis Arrhythmias Arteries
arterioles arteriosclerosis artery arthralgia Arthritis
arthrodesis arthroscopy arthroplasty arthroscopists asymptomatic
asystole atherosclerosis auscultation autocrine
autoinoculation autoimmune valves avascular axilla
axons baroreceptors Bartholin's glands
benign bicarbonate binocular binocular biopsy
brachial artery brachytherapy brachytherapy bronchiectasis
bronchodilators bronchitis bronchitis Cancer capillaries
carbohydrates carcinogenesis cardiac cycle cardiac
muscle cardiac notch cardiac tamponade
cardiac troponin Cardiology cardiac tamponade
congenital convex coronary artery bypass graft
(CABG) coronary artery disease cranioschisis
Cryptorchidism cryptorchidism cyanosis cyanotic
cytokines cytotrophoblastic giant cell tumor amputation debridement



Georgian



CONESTOGA

Sheridan

Building a Medical Terminology 2e - Student Companion Workbook

KIMBERLEE CARTER; MARIE RUTHERFORD; AND CONNIE STEVENS

GEORGIAN COLLEGE



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Accessing and using Building a Medical Terminology 2e – Student Companion Workbook

This resource is an Open Educational Resource (OER). An Open Educational Resource is a learning material intentionally created and licensed to be available to the user with little or no cost involved.

This resource is meant to accompany the textbook *Building a Medical Terminology 2e* (<https://ecampusontario.pressbooks.pub/medicalterminology2/>).

In this resource, you will work through each body system, learning word parts, whole medical terms, and common abbreviations associated with that particular body system. Interactive content is built into each chapter. Interactive reinforcement activities require you to click, drag and drop, listen and repeat, flip, and test yourself.

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Book Formats

Typical OER Textbook Formats, Requirements, Features & Access Options

Book Format	Requirements	Features	Access Options
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- | | | |
|----------------|--------------|--------------|
| • Front Matter | • Chapter 6 | • Chapter 12 |
| • Chapter 1 | • Chapter 7 | • Chapter 13 |
| • Chapter 2 | • Chapter 8 | • Chapter 14 |
| • Chapter 3 | • Chapter 9 | • Chapter 15 |
| • Chapter 4 | • Chapter 10 | • Chapter 16 |
| • Chapter 5 | • Chapter 11 | • Chapter 17 |

Book, Worksheets & Activities alone

- Book contents with clickable links, without worksheets/activities
- Book contents for printing, without worksheets/activities

The activities and worksheets, attached at the bottom of each chapter/page in this book, can be downloaded separately.

- Worksheets & Activities in Word format [Zip file containing Word]: best if you'd like to fill out the worksheets on your computer.
- Worksheets & Activities in PDF format [Zip file containing PDF]: best if you'd like to print all worksheets and fill out with pen/pencil.

Recommendations

- Check for printing costs at your on-campus print shop or a local print shop (Staples, etc.).
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Introduction

Medical terminology is the language of healthcare. This is the language health professionals use to communicate. This specialized language covers anatomical structure, function, tests, procedures, and much more. Learning medical terminology can be challenging, so developing a consistent study strategy can be helpful. This interactive workbook and its associated activities are designed to enhance the learning and study strategy. It is recommended to use this resource as a companion to *Building a Medical Terminology Foundation 2e* (<https://ecampusontario.pressbooks.pub/medicalterminology2/>). The chapter alignment and arrangement contained in the workbook aligns with this resource.

Students: We are excited to have you embark on the journey of learning medical terminology. This interactive workbook is designed to help make the learning experience more engaging.

Our tips to help you:

- Engage frequently with the activities.
- Practice consistently.
- Complete the workbook activities regularly.

Faculty and Teaching Staff: We are excited to introduce this workbook to enhance the learning experience for your students. As a resource tool, this workbook supports our students in learning complex medical terminology.

Some key features include:

- Interactive H5P activities for learners to reinforce and self-check their learning
- Worksheets (downloadable) to practice, reinforce, and apply learning
- Activity documents (downloadable) to practice, reinforce, and apply learning

About this Companion Workbook

This companion book is an adaptation of *Medical Terminology* [New tab] (<https://nicoletcollege.pressbooks.pub/ltcmedicalterminology/>) by Nicolet College, which is licensed under a Creative Commons Attribution 4.0 International License. That book was adapted from eCampus Ontario's version of *Building a Medical Terminology Foundation* [New tab] (<https://ecampusontario.pressbooks.pub/medicalterminology/>) by K. Carter and M. Rutherford, licensed under a Creative Commons Attribution 4.0 International License, which was initially adapted from the OpenStax *Anatomy and Physiology OER* [New tab] by Betts, et al., licensed under a Creative Commons Attribution 4.0 International License.

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Cite this workbook

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Acknowledgements

Land Acknowledgement

We wish to acknowledge and honour Indigenous history and in the spirit of reconciliation, we convey our respect to First Nations, Métis, and Inuit people.

Conestoga College is located on the traditional territory of the Anishnaabe, Haudenosaunee, and Neutral peoples. Georgian College campuses are situated on the traditional land of the Anishnaabeg people. The Anishnaabeg include the Odawa, Ojibwe, and Pottawatomi nations, collectively known as the Three Fires Confederacy. Sheridan campuses reside on traditional land territory of the Mississaugas of the Credit First Nations, Anishnaabe Nation, Huron-Wendat and the Haudenosaunee Confederacy.

As this workbook is an adaptation of Medical Terminology Student Companion (<https://nicoletcollege.pressbooks.pub/studentcompaniontobuildingamedicaltermfound/>), we want to thank the dedicated team who collaborated on the original resource:

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Accessibility Statement

Accessibility Features of the Web Version of this Resource

The web version of *Building a Medical Terminology Foundation 2e Student Companion* has been designed with accessibility in mind by incorporating the following features:

- It has been optimized for people who use screen-reader technology.
 - Content can be navigated using a keyboard.
 - Links, headings, and tables are formatted to work with screen readers.
- Images in this OER are described through the use of text around the image, alt-text, captions or in the image description section for complex images.
 - Due to the complex visual nature of anatomy images and diagrams, alt text description may be longer than typically considered best practice. This allows for a more effective description of the information being conveyed by image/size/colour/labels.
 - If there are errors or concerns, please contact OER[at]georgiancollege.ca
- Where possible, information is not conveyed by colour alone
- Pressbooks has built-in features such as the ability to change font size.

Other File Formats Available

In addition to the web version, additional files are available in a number of file formats including PDF (digital and print).

Known Accessibility Issues and Areas for Improvement

This book's adapters have attempted to improve upon existing features from the original sources and improve these materials for all users.

While we strive to ensure that this resource is as accessible and usable as possible, we might not always get it right. Any issues we identify will be listed below. If you encounter issues with this text, please notify your professor.

List of Known Accessibility Issues

Location of Issue	Need for Improvement	Timeline	Work Around
Interactive activities (H5P)	H5Ps containing images may not be fully accessible	On going	Text version of interactive activities with alt text provided
PDF version of book	PDF version of book generated by the Pressbooks export system may not be fully accessible	On going	Use webbook for the most accessible version of the content
Footnotes (used for activity solutions)	Questions/answers may not be optimized in ordered lists due to limitations of the footnote tool	Unknown	Ordered lists have been used when possible; some footnote/answers will read as a sentence with answers
Downloadable Word worksheets/ activities	Worksheets contain lists and tables to be completed by students, and may pose some accessibility issues. Heading structure has been added, but the nature of the tasks associated with identifying and labeling anatomical images is difficult may persist.	On going	Students are encouraged to work with their adaptive technologist if problems persist.
Complex images	Many complex images are used throughout the text to help students better understand anatomy, and identify different systems and how they function. This is a very visual process, and may not translate effectively into descriptive text.	On going	Accessibility features have been added where possible. Work is on going.

Accessibility Standards

The web version of this resource has been designed to meet AODA requirements (<https://www.aoda.ca/the-act/>), along with the Web Content Accessibility Guidelines 2.0 (<https://www.w3.org/TR/WCAG20/>), level AA. In addition, it follows all guidelines in Appendix A: Checklist for Accessibility (<https://opentextbc.ca/accessibilitytoolkit/back-matter/appendix-checklist-for-accessibility-toolkit/>) of the *Accessibility Toolkit – 2nd Edition* (<https://opentextbc.ca/accessibilitytoolkit/>).

This statement was last updated on August 13, 2024.

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CHAPTER 1: INTRODUCTION TO MEDICAL TERMS

Identifying Word Parts in Medical Terms

If you would like to review the textbook chapter content, please visit **Chapter 1: Introduction to Medical Terms** [New Tab] (<https://ecampusontario.pressbooks.pub/medicalterminology2/part/ch-1-introduction-to-medical-terms/>).

Learning Objectives

- Outline the elements used to build medical terms
- Analyze, identify, and construct medical words using applicable medical language component parts
- Explore medical language rules

Defining Words

Apply the rules of medical language to pronounce, break into word parts, and define the following words.

1. intravenous (in-tră-VĒ-nūs)
2. osteoarthritis (ă-stē-ō-ăr-'thrī-təs)
3. osteoarthropathy (ă-stē-ō-ăr-THROP-ă-thē)

Label each word part by using the following abbreviations:

- P = Prefix
- WR = Word Root
- CV = Combining Vowel
- S = Suffix
- CF = Combining Form

Word Parts

Word Parts (Text Version)

Make sure you understand key parts of medical terminology. Fill in the blanks using the following words:

- Suffix
- Prefix
- Combining Form
- Word Root

1. _____[Blank 1] word part at the beginning of the term that changes meaning
2. _____[Blank 2] word part at the end of the term that changes meaning
3. _____ [Blank 3] foundational meaning of a word
4. _____ [Blank 4] used to join word parts to ease pronunciation

Check your answers: ¹

Activity Source: Key Terms by Peggy French, licensed under CC BY 4.0./Text version added.

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Notes

1. 1. Prefix, 2. Suffix, 3. Word Root, 4. Combining Form

CHAPTER 2: MEDICAL LANGUAGE WITHIN THE CONTEXT OF ANATOMY AND PHYSIOLOGY

Medical Language Related to the Body as a Whole

If you would like to review the textbook chapter content, please visit **Chapter 2: Medical Language Within the Context of Anatomy and Physiology [New Tab]**.

Learning Objectives

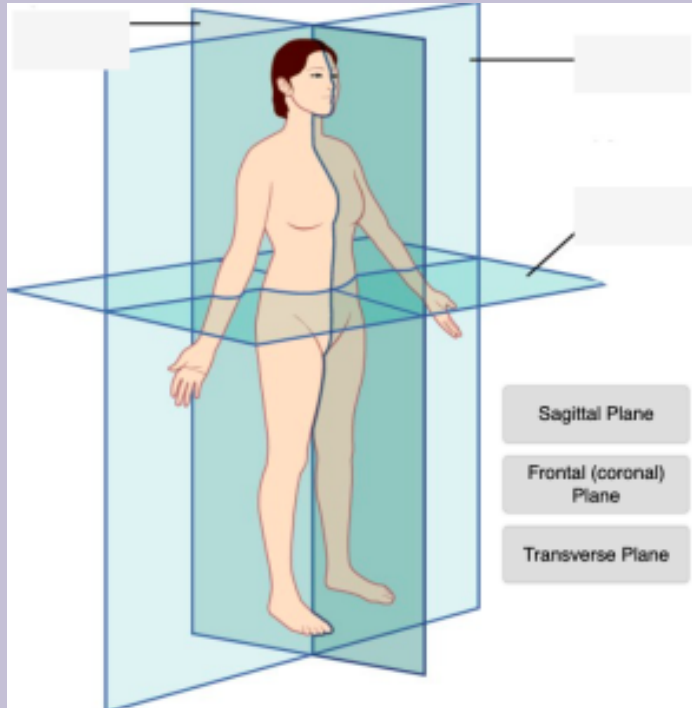
- Connect medical language learning to the context of anatomy and physiology
- Introduce the basic architecture and levels of organization of the human body
- Evaluate the anatomical position, regional terms, directional terms, body planes, and body quadrants for anatomical positioning
- Describe body cavities and the functions of associated membranes

Body Planes

Use the anatomic reference system to identify the body planes below:

Body Planes (Text Version)

1. Sagittal Plane
2. Frontal (coronal) Plane
3. Transverse Plane



Body Planes Diagram (Text Version)

This illustration activity shows the human body standing upright in the anatomical position. Three anatomical planes are illustrated with transparent lines identifying the location of the three planes: the _____[Blank 1] which divides the left and right side of the body, the _____[Blank 2] dividing front and back portions of the body, and the _____[Blank 3] dividing top and bottom portion of the body.

Check your answers: ¹

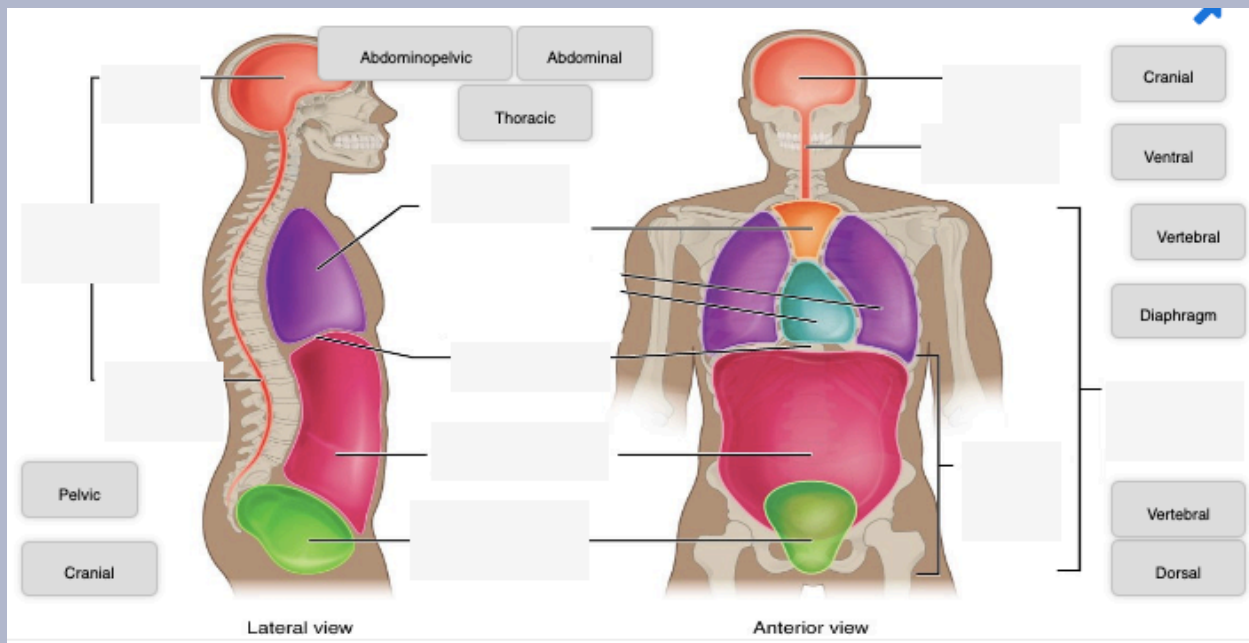
Activity source: Medical language with the Context of Anatomy and Physiology Body by Tiffany Hunt, illustration from Anatomy and Physiology (OpenStax) licensed under CC BY 4.0./ Text version added.

Body Cavities

Use the anatomic reference system to identify the body cavities:

Body Cavities (Text Version)

- | | | |
|-------------------|--------------|---------------|
| 1. Abdominopelvic | 5. Cranial | 9. Dorsal |
| 2. Abdominal | 6. Ventral | 10. Cranial |
| 3. Thoracic | 7. Vertebral | 11. Vertebral |
| 4. Pelvic | 8. Diaphragm | |



Body Cavities Diagram (Text Version)

This diagram activity shows two views of the human head and torso. The right image shows the lateral view, and the left image shows an anterior view of the human head and torso. The image is highlighting the several cavities or hollowed out spaces where organs and structures are positioned. The lateral view show four cavities: the head cavity known as the _____[Blank 1], the upper back cavity known as the _____[Blank 2], the lower back area known as the _____[Blank 3], and the chest cavity known as the _____[Blank 4] cavity. Adjoining lines for both views identify the _____[Blank 5] which is a muscular partition dividing the lungs from the location below it known as the _____[Blank 6] and followed by the lower _____[Blank 7]. The anterior view identifies the _____[Blank 8], _____[Blank 9], _____[Blank 10], _____[Blank 11] cavities, and sections.

Check your answers: ²

Activity source: Medical language with the Context of Anatomy and Physiology Dorsal by Tiffany Hunt, illustration from Anatomy and Physiology (OpenStax) licensed under CC BY 4.0./Text version added.

Directional Terms

Practice pronouncing and defining the following directional terms:

Medical Language with the Context of Anatomy and Physiology Directional Terms (Text version)

1. Cranial Cavity

- KRĀ-nē-āl kah-vi-tē
- The space formed inside the skull that the brain occupies.

2. Homeostasis

- HŌ-mē-ō-STĀ-sīs
- Biological process that results in stable equilibrium

3. Posterior (or Dorsal)

- pōs-TĒ-rē-or(Original Term)
- Describes the back or direction toward the back of the body.

4. Anterior (or Ventral)

- an-TĒR-ē-ōr (Original Term)
- Describes the front or direction toward the front of the body.

5. Deep

- DĒP (Original Term)
- Describes a position farther from the surface of the body.

6. Distal

- DIS-tāl (Original Term)
- Describes a position in a limb that is farther from the point of attachment or the trunk of the body.

7. Inferior (or Caudal)

- in-FĒR-ē-ōr (Original Term)
- Describes a position below or lower than another part of the body proper; near or toward the tail.

8. Lateral

- LĀT-ēr- āl (Original Term)
- Describes the side or direction toward the side of the body.

9. Medial

- MĒD-ē-āl (Original Term)
- Describes the side or direction toward the side of the body.

10. Peritoneum

- (per-it-ō-NĒ-ŭm)
- Serous membrane surrounding several organs in the abdominopelvic cavity. This reduces friction between the abdominal and pelvic organs and the body wall.

11. Proximal

- PROK-sī-māl (Original Term)

- Describes a position in a limb that is nearer to the point of attachment or the trunk of the body.

12. **Superficial**

- SOO-pĕr-FISH-ăl (Original Term)
- Describes a position in a limb that is nearer to the point of attachment or the trunk of the body.

13. **Superior (or Cranial)**

- soo-PĒ-rē-or(Original Term)
- Describes a position above or higher than another part of the body proper.

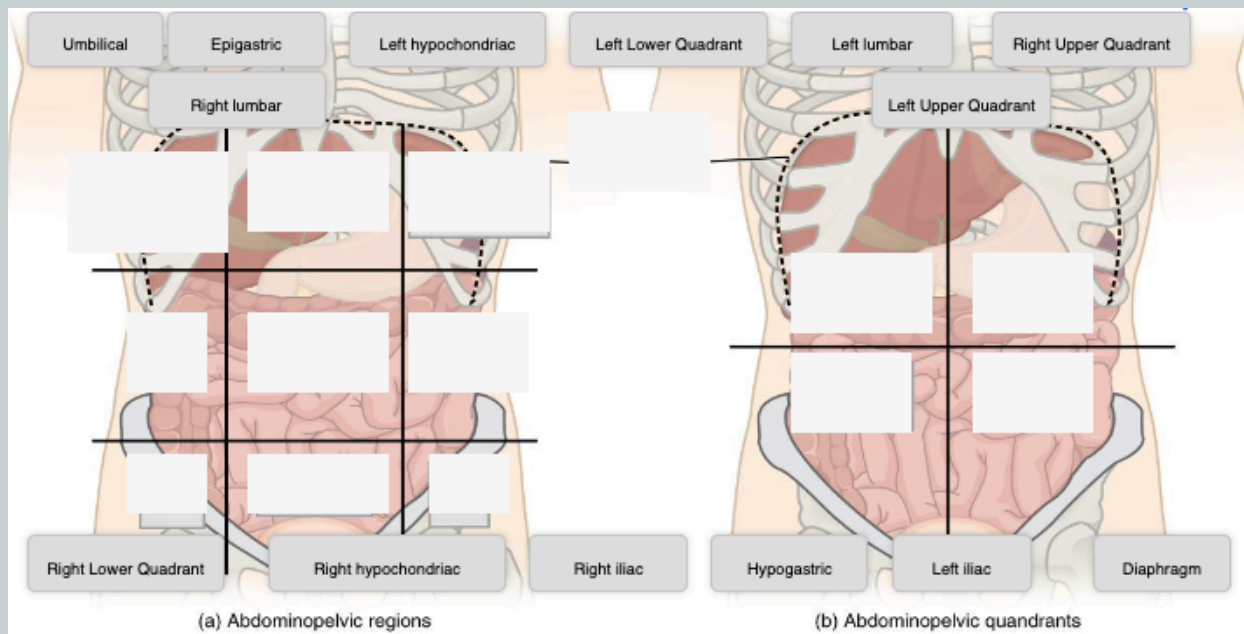
Activity Source: Medical Language with the Context of Anatomy and Physiology Directional Terms from *Medical Terminology* by Grimm et al., licensed under CC BY 4.0./Re-recording of some H5P audio by Tania Deane and David McCuaig and text version added.

Regions and Quadrants of the Body

Use the anatomic reference system to identify the regions and quadrants of the body pictured below:

Regions and Quadrants of the Body (Text Version)

- | | | |
|-------------------------|--------------------------|-------------------------|
| 1. Umbilical | 6. Right Hypochondriac | 11. Left Upper Quadrant |
| 2. Epigastric | 7. Right Iliac | 12. Hypogastric |
| 3. Left Hypochondriac | 8. Left Lower Quadrant | 13. Left Iliac |
| 4. Right Lumbar | 9. Left Lumbar | 14. Diaphragm |
| 5. Right Lower Quadrant | 10. Right Upper Quadrant | |



Regions and Quadrants of the Body Diagram (Text version)

This diagram activity shows two views of the abdominopelvic region. Image A shows the abdominopelvic region divided in nine sections with nine boxes. Image B shows the abdominopelvic region divided in four sections known as quadrants with a line dividing the four sections for each quadrant. For image A at the top are three white boxes identified working from right to left labeled as _____[Blank 1], followed by _____[Blank 2], and _____[Blank 3] region. The middle three boxes working from right to left identified as _____[Blank 4], followed by the _____[Blank 5], and _____[Blank 6] region. The three lower boxes working from right to left is the _____[Blank 7], followed by _____[Blank 8], and _____[Blank 9] region. Image B shows two upper white boxes and are from right to left is the _____[Blank 10] followed by the _____[Blank 11]. The two lower boxes from right to left is the _____[Blank 12] followed by _____[Blank 13].

Check your answers: ³

Activity source: Medical language with the Context of Anatomy and Physiology Dorsal by Tiffany Hunt, illustration from Anatomy and Physiology (OpenStax) licensed under CC BY 4.0./Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Test Your Knowledge (Text Version)

1. The smallest unit of any of these pure substances (elements) is a(n) _____ [Blank 1].
 1. Cell
 2. Atom
 3. Organ
2. Describes a position closer to the surface of the body.
 1. Superficial
 2. Anterior
 3. Superior
3. The plane that divides the body or organ horizontally into upper and lower portions is called the _____ [Blank 2].
 1. Sagittal Plane
 2. Transverse Plane
 3. Frontal Place
4. The cavity that includes the cranial cavity and spinal cavity is called the _____ [Blank 3].
 1. Posterior cavity
 2. Anterior cavity
 3. Ventral Cavity
5. The name of the layer of the membrane that covers the organs is the _____ [Blank 4].
 1. Serous layer
 2. Visceral layer
 3. Parietal layer

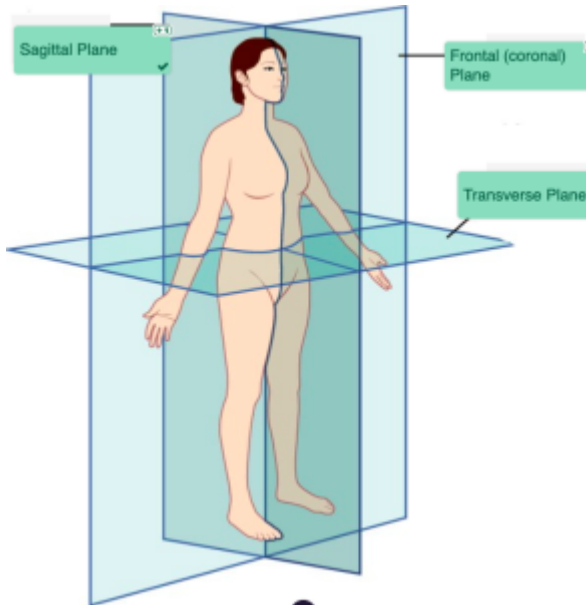
Check your answers: ⁴

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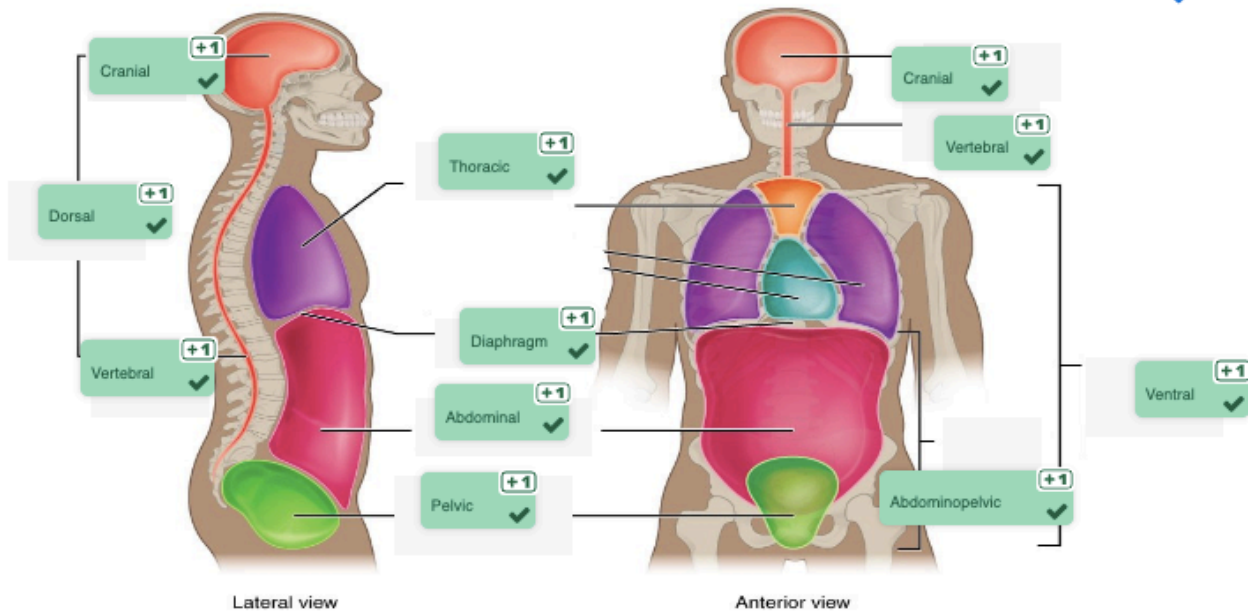
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Notes



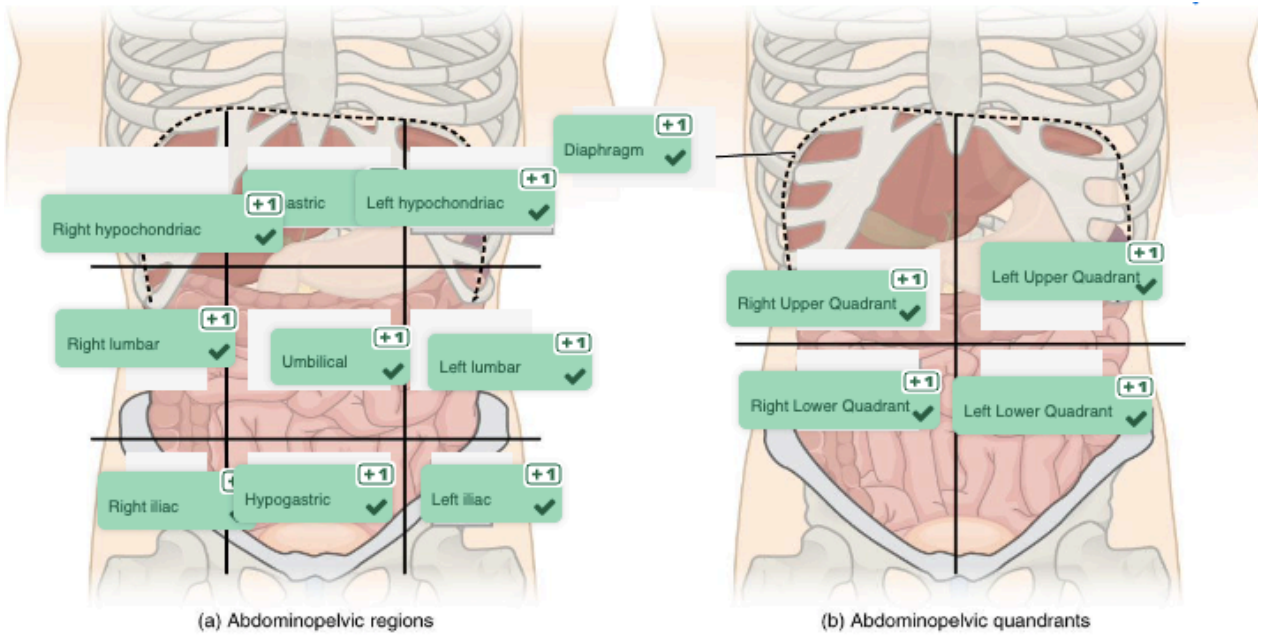
1.

Check your answers: Body Planes Diagram This illustration activity shows the human body standing upright in the anatomical position. Three anatomical planes are illustrated with transparent lines identifying the location of the three planes: the **sagittal plane** which divides the left and right side of the body, the **frontal plane** dividing front and back portions of the body, and the **transverse plane** dividing top and bottom portion of the body.



2.

Check your answers: Body Cavities Diagram (Text Version) This diagram activity shows two views of the human head and torso. The right image shows the lateral view, and the left image shows an anterior view of the human head and torso. The image is highlighting the several cavities or hollowed out spaces where organs and structures are positioned. The lateral view show four cavities: the head cavity known as the **cranial**, the upper back cavity known as the **dorsal**, the lower back area known as the **vertebral**, and the chest cavity known as the **thoracic** cavity. Adjoining lines for both views identify the **diaphragm** which is a muscular partition dividing the lungs from the location below it known as the **abdominal cavity** and followed by the lower **pelvic cavity**. The anterior view identifies the **cranial**, **vertebral**, **ventral**, **abdominopelvic** cavities, and sections.



3. **Check your answers: Regions and Quadrants of the Body Diagram (Text Version)** This diagram activity shows two views of the abdominopelvic region. Image A shows the abdominopelvic region divided in nine sections with nine boxes. Image B shows the abdominopelvic region divided in four sections known as quadrants with a line dividing the four sections for each quadrant. For image A at the top are three white boxes identified working from right to left labeled as **right hypochondriac**, followed by **epigastric**, and **left hypochondriac** region. The middle three boxes working from right to left identified as **right lumbar**, followed by the **umbilical**, and **left lumbar** region. The three lower boxes working from right to left is the **right iliac**, followed by **hypogastric**, and **left iliac** region. Image B show two upper white boxes and are from right to left is the **right upper quadrant** followed by the **left upper quadrant**. The two lower boxes from right to left is the **right lower quadrant** followed by **left lower quadrant**.
4. 1. Atom, 2. Superficial, 3. Transverse plane, 4. Posterior cavity, 5. Visceral layer

CHAPTER 3: INTEGUMENTARY SYSTEM

Integumentary System

If you would like to review the textbook chapter content, please visit **Chapter 3: Integumentary System** [New Tab].

Learning Objectives

- Identify the anatomy and describe the main functions of the integumentary system and accessory structures
- Analyze, translate, and define medical terms and common abbreviations of the integumentary system
- Practice the spelling and pronunciation of integumentary system medical terminology
- Identify the medical specialties associated with the integumentary system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the integumentary system:

Prefixes

- a- (absence of, meaning)
- bi- (two or both)
- dia- (through, complete)
- dys- (difficult, painful, abnormal, labored)
- epi- (upon, on, over)
- hyper- (above, excessive)
- hypo- (deficient, below, under, incomplete)
- intra- (within, in)
- meta- (change, beyond, after)

- neo- (new)
- para- (beside, around, beyond, abnormal)
- per- (through)
- pro- (before)
- sub- (under, below)
- trans- (through, across, beyond)
- uni- (one)

Combining Forms

- aden/o (gland)
- adip/o (fat)
- albin/o (white)
- aut/o (self)
- bi/o (life)
- coni/o (dust)
- cry/o (cold)
- crypt/o (hidden)
- cutane/o (skin)
- cyan/o (blue)
- derm/o (skin)
- dermat/o (skin)
- erythr/o (red)
- erythemat/o (redness)
- fibr/o (fibrous tissues)
- heter/o (other)
- hidr/o (sweat)
- kerat/o (hard, horny tissue, keratin)
- lei/o (smooth)
- leuk/o (white)
- lip/o, lipid/o (fat)
- melan/o (black)
- myc/o (fungus)
- necr/o (death)
- onych/o (nail)
- pachy/o (thick)
- pil/o (hair)
- py/o (pus)
- rhytid/o (wrinkles)
- sclera/o (hardening)
- seb/o (sebum)
- staphyl/o (grapelike clusters)
- steat/o (fat, sebum)

- strept/o (twisted chains)
- ungu/o (nail)
- xanth/o (yellow)
- xer/o (dryness, dry)

Suffixes

- -a (no meaning, noun ending)
- -al (pertaining to)
- -ad (toward)
- -coccus (berry-shaped)
- -cyte (cell)
- -ectomy (excision)
- -gen (substance that produces/causes, agent that produces/causes)
- -genic (producing, originating, causing)
- -ia (condition of, diseased state, abnormal state)
- -ic (pertaining to)
- -itis (inflammation)
- -ior (pertaining to)
- -logy (study of)
- -logist (specialist who studies and treats)
- -malacia (softening)
- -megaly (enlarged, enlargement)
- -oid (resembling)
- -oma (tumor, swelling)
- -opsy (view of, process of viewing, viewing)
- -orrhoea (flow, excessive discharge)
- -osis (abnormal condition, increased numbers relating to blood)
- -ous (pertaining to)
- -pathy (disease)
- -phagia (eating, swallowing)
- -plasia (development, growth, condition of formation)
- -plasm (growth, substance, formation)
- -plasty (surgical repair)
- -rrhea (flow, discharge)
- -sis (state of)
- -stasis (stop, controlling, standing)
- -tome (instrument used to cut)

Integumentary System Words

Integumentary Medical Terms (Text version)

1. **biopsy (bx)**

- BĪ-op-sē
- view of life (removal of living tissue to be viewed under a microscope)

2. **dermatitis**

- dĕr-mă-TĪT-ĭs
- inflammation of the skin

3. **dermatoplasty**

- dĕr-mă-tō-AW-tō-plās-tē
- surgical repair using one's own skin

4. **dermatosis**

- dĕr-mă-tō-kō-nē-Ō-sĭs
- abnormal condition of the skin caused by dust

5. **dermatofibroma**

- dĕr-mă-tō-fĭ-BRŌ-mă
- fibrous tumour of the skin

6. **dermatoheteroplasty**

- dĕr-mă-tō-HĒT-ĕr-ō-plās-tē
- surgical repair using skin from others

7. **dermatologist**

- dĕr-mă-TŌL-ō-jĭst
- Physician who specializes in treating diseases and disorders of the skin

8. **dermatology (derm)**

- dĕr-mă-TŌL-ō-jē
- study of the skin

9. **dermatome**

- DĒR-mă-tōm
- instrument used to cut skin

10. **dermatoplasty**

- DĚR-măt-ō-plas-tē
- get meaning

11. **epidermal**

- ěp-ĭ-DĚR-mal
- pertaining to upon/on the skin

12. **erythroderma**

- ě-rith-rō-DĚR-mă
- red skin

13. **hidradenitis**

- hi-dra-ěn-ĪT-ĭs
- inflammation of a sweat gland

14. **hypodermic**

- hĭ-pō-DĚR-mĭk
- pertaining to below the skin

15. **intra-dermal (ID)**

- in-tră-DĚR-măl
- pertaining to within the skin

16. **keratogenic**

- kĕr-ă-TŎJ-ě-nŭk
- agent that causes growth of horny tissue

17. **keratosis**

- ker-ă-TŎ-sĭs
- abnormal condition of growth of horny tissue

18. **leiodermia**

- lĭ-ō-DĚR-mĕ-ă
- condition of smooth skin

19. **leukoderma**

- loo-kō-DĚR-mă
- white patches caused by depigmentation

20. **necrosis**

- nĕ-KRŎ-sĭs
- condition of death

21. **onychocryptosis**

- ǒn-ĩ-kō-krip-TŌ-sis
- abnormal condition of a hidden nail

22. **onychomalacia**

- ǒn-ĩ-kō-mǎ-LĀ-shǎ
- softening of the nails

23. **onychomycosis**

- on-i-kō-mī-KŌ-sīs
- abnormal condition of a fungus in the nails

24. **onychophagia**

- ǒn-ĩ-KŎF-ǎ-jē
- eating the nails (nail biting)

25. **pachyderma**

- pak-ē-DĚR-mǎ
- thickening of the skin

26. **paronychia**

- pār-ō-NĪK-ē-ǎ
- diseased state around the nail

27. **percutaneous**

- pěr-kū-TĀ-nē-űs
- pertaining to through the skin

28. **rhytidectomy**

- rit-ĩ-DEK-tǒ-mē
- excision of the wrinkles

29. **rhytidoplasty**

- RĪT-ĩ-dō-plās-tē
- surgical repair of wrinkles

30. **seborrhea**

- sěb-or-Ē-ǎ
- discharge (excessive) of sebum

31. **staphylococcus (staph)**

- staf-ĩ-lō-KOK-űs

- berry-shaped bacterium in grape-like clusters

32. **streptococcus (strep)**

- strep-tŏ-KOK-ŭs
- berry-shaped bacterium in twisted chains

33. **subcutaneous (subcut, Sub-Q)**

- sŭb-kŭ-TĀ-nĕ-ŭs
- pertaining to under the skin

34. **subungual**

- sŭb-ŬNG-gwĕl
- pertaining to under the nail

35. **transdermal (TD)**

- trĕnz-DĚRM-ĕl
- pertaining to through the skin

36. **ungual**

- ŬNG-gwĕl
- pertaining to the nail

37. **xeroderma**

- zer-ŏ-DĚR-mĕ
- dry skin

38. **xerosis**

- zĕ-RŌ-sĭs
- abnormal condition of dryness

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Pronouncing and Defining Integumentary System Medical Terms

Integumentary Medical Terms (Text version)

1. **abscess**

- AB-ses (Original Term)
- localized collection of pus

2. **abrasion**

- ă-BRĀ-zhōn (Original Term)
- scrape (by injury or mechanical process)

3. **acne**

- AK-nē
- clogging of pores, which can lead to infection and inflammation

4. **adipocytes**

- AD-ĭ-pō-sīts
- Fat cells

5. **adipose**

- AD-ĭ-pōs
- Fat tissue

6. **albinism**

- AL-bĭ-nizm
- genetic disorder that affects the coloring of skin, hair, and eyes.

7. **apocrine sweat gland**

- AP-ō-krĕn swet gland
- A type of gland that is found in the skin, breast, eyelid, and ear

8. **autonomic**

- ot-ō-NOM-ik
- unconsciously regulates

9. **bacteria, bacterium**

- bak-TĒR-ē, bak-TĒR-ē-ŭm (Original Term)
- single-celled microorganisms that reproduce by cell division and may cause infection by invading body tissue

10. **basal cell carcinoma (BCC)**

- BĀ-sāl sel kar-sĭn-Ō-ma
- form of cancer that affects the mitotically active stem cells in the stratum basale of the epidermis

11. **benign**

- bē-NĪN
- Noncancerous, harmless

12. **cancer**

- KAN-sĕr
- A process where abnormal cells in the body divide uncontrollably

13. **cauterize, cauterization**

- KAW-tĕr-ĭz (Original Term)
- to burn tissues by various means with the intent destroy damaged tissues, prevent infections or coagulate blood vessels

14. **cellulitis**

- sel-yŭ-LĪT-ĭs (Original Term)
- bacterial infection of the skin and subcutaneous tissue, characterized by redness, pain, heat and swelling

15. **contusion**

- kŏn-TOO-zhŏn (Original Term)
- bruise

16. **cyanosis**

- sĭ-ă-NŌ-sĭs
- Abnormal condition of blue (bluish colour, lips and nail beds). Typically caused by low oxygenation

17. **cyst**

- sist (Original Term)
- closed sac containing fluid or semisolid material

18. **debride, debridement**

- di-BRĒD, di-BRĒD-mĕnt (Original Term)
- remove damaged tissues and cell debris from a wound or burn to prevent infection and promote healing.

19. **dehydration**

- dĕ-hĭ-DRĀ-shŏn
- Loss of fluids/water is greater than what is taken in.

20. **dendritic cells**

- den-DRIT-ik
- pertaining to dendrites

21. **dermabrasion**

- DĚRM-ă-brā-zhŏn (Original Term)
- procedure to remove superficial scars using sandpaper or revolving wire brushes.

22. **diaphoresis**

- dī-ă-fō-RĒ-sīs (Original Term)
- condition of profuse, excessive sweating

23. **eccrine sweat gland**

- ĚK-rĭn swet gland
- type of gland that produces a hypotonic sweat for thermoregulation

24. **eczema**

- eg-ZĚ-mă (Original Term)
- noninfectious, inflammatory disease presents as redness, blisters, scabs and itching

25. **edema**

- ě-DĚ-mă (Original Term)
- puffy swollen tissue due to accumulation of fluid

26. **excise, excision**

- ěk-SĪZ, ek-SIZH-ŏn (Original Term)
- surgical removal by cutting out

27. **fascia**

- FASH-ĕ-ă
- Fibrous tissue

28. **frostbite**

- FROST-bit
- Conservation of core body heat results in the skin actually freezing

29. **gangrene**

- GANG-grĕn (Original Term)
- death of tissue due to blood supply loss

30. **incise, incision**

- in-SĪZ, in-SIZH-ŏn (Original Term)
- surgical cut into or wound produced by a sharp instrument

31. **incision and drainage (I&D)**

- in-SIZH-ŏn & DRĀN-ăj
- surgical cut made to allow the free flow of fluids from a lesion, wound, or cavity

32. **infection**

- in-FEK-shŏn (Original Term)
- invasion of pathogens to body tissue

33. **jaundice, jaundiced**

- JON-dīs, JON-dīsd (Original Term)
- yellow colouring of the mucous membranes and sclera

34. **keloid**

- (KĒ-loyd)
- Formation of a raised or hypertrophic scar

35. **keratin**

- (KER-ăt-ĭn)
- intracellular fibrous protein that gives hair, nails, and skin their hardness and water-resistant properties

36. **keratinocyte**

- kĕ-RĀT-ĭ-nō-sīt
- Cell that manufactures and stores the protein keratin

37. **laceration**

- las-ĕ-RĀ-shŏn (Original Term)
- torn, ragged-edged wound

38. **laser surgery**

- LĀ-zĕr SŪRJ-ĕ-rĕ
- A surgical procedure using a powerful beam of light to cut or burn tissue.

39. **Lesion**

- lĒ-zhŏn (Original Term)
- visible change in tissue resulting from injury or disease

40. **leukoplakia**

- loo-kō-PLĀ-kĕ-ă
- white, thickened patches on mucus membrane tissue of the tongue or cheek

41. **macule**

- MAK-ŭl (Original Term)
- flat, coloured spot on the skin

42. **Meissner corpuscle**

- MĪS-nĕr KOR-pŭs-ĕl
- Tactile corpuscle that responds to light and touch, touch receptor

43. **melanoma**

- mel-ă-NŌ-mă

- cancer characterized by uncontrolled growth of melanocytes

44. **metastasize**

- mĕ-TĀS-tă-sīz
- Production of cells that can mobilize and establish tumors in other organs of the body

45. **nevus**

- NĒ-vūs (Original Term)
- a pigmented skin blemish

46. **nodule**

- NOJ-ool (Original Term)
- a small node-like structure

47. **Pacinian corpuscle**

- pă-SIN-ĕ-ăn KOR-pūs-ĕl
- Lamellated corpuscle that responds to vibration

48. **pallor**

- PĀL-or (Original Term)
- paleness

49. **pathogens**

- path-Ō-jĕns
- Disease-causing agents

50. **phagocytes**

- fĕg-ō-SĪTS
- Cells that engulf and absorb bacteria and cell particles

51. **pruritus**

- proo-RĪT-ūs (Original Term)
- itching

52. **psoriasis**

- sŏ-RĪ-ă-sīs
- chronic autoimmune disorder that results in patches of thick red skin with the appearance of silvery scales

53. **pustule**

- PŪS-tŭl (Original Term)
- small elevation of the skin containing fluid

54. **reticulated**

- rě-TIK-yŭ-lāt-ěd
- constructed, arranged, or marked like a net or network.

55. **rickets**

- RIK-ěts
- A painful condition in children where bones are misshapen due to a lack of calcium, causing bow leggedness

56. **scar**

- skār
- Collagen-rich skin formed after the process of wound healing that differs from normal skin. Also known as a cicatrix.

57. **sebaceous gland**

- sē-BĀ-shŭs gland
- type of oil gland that is found all over the body and helps to lubricate and waterproof the skin and hair.

58. **squamous cell carcinoma (SCC)**

- SKWĀ-mŭs sel kar-sĭn-Ō-mă
- cancer that affects the keratinocytes of the stratum spinosum and presents as lesions commonly found on the scalp, ears, and hands

59. **stratum basale**

- STRĀ-tŭm BĀS-al
- Deepest layer of the epidermal

60. **suture**

- SOO-chŭr
- to stitch the edges of a wound

61. **sympathetic**

- sĭm-pă-THĚT-ĭk
- Flight or fight response

62. **Sympathetic Nervous System**

- sĭm-pă-THĚT-ĭk NĚR-vŭs SIS-tĕm
- Responsible for fight or flight responses

63. **tinea**

- TIN-ē-ă (Original Term)
- A group of fungal skin diseases, characterized by itching, scaling, and sometimes painful lesions.

64. **vascularized**

- VAS-kyū-lā-rīzd
- Has numerous blood vessels

65. **verruca**

- vēr-ROO-kǎ
- Also known as a wart. An epidermal growth caused by a virus.

66. **virus**

- VĪ-rūs (Original Term)
- minute microorganism that may cause infection by invading body tissue

Activity Source: Integumentary Medical Terms from *Medical Terminology* by Grimm et al., licensed under CC BY 4.0. /Re-recording of some H5P audio by Tania Deane and David McCuaig and text version added.

Pronouncing and Defining Commonly Abbreviated Integumentary System Terms

Practice pronouncing and defining these commonly abbreviated integumentary system terms:

- BCC (basal cell carcinoma)
- bx (biopsy)
- CA-MRSA (community-associated MRSA)
- derm (dermatology)
- HA-MRSA (healthcare-associated MRSA)
- I&D (incision and drainage)
- ID (intra-dermal)
- MRSA (methicillin-resistant *Staphylococcus aureus*)
- SCC (squamous cell carcinoma)
- SLE (systemic lupus erythematosus)
- staph (staphylococcus)
- strep (streptococcus)
- subcut, Sub-Q (subcutaneous)
- TD (transdermal)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

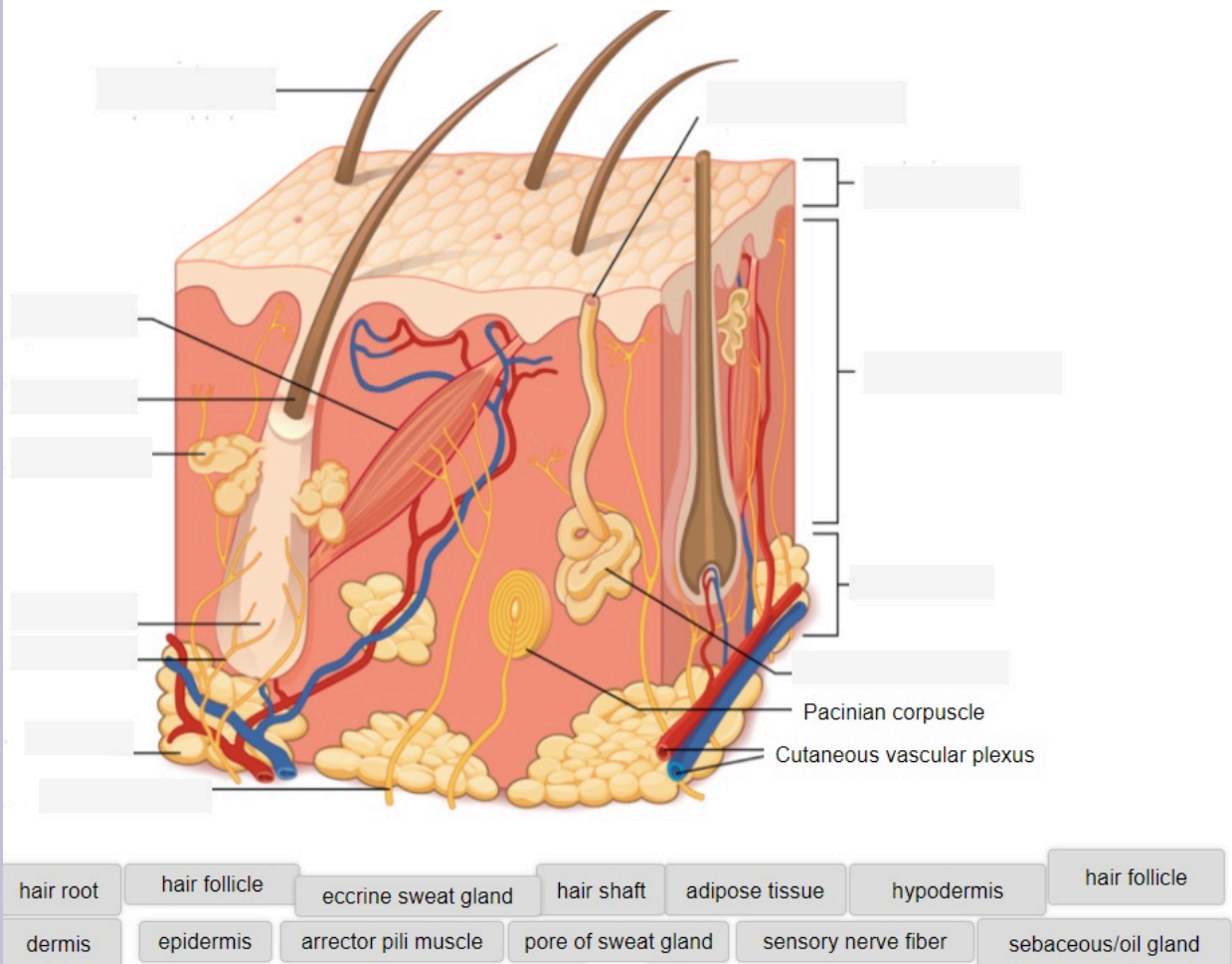
Layers of the Skin

Practice labeling the layers of the skin:

Layers of the Skin (Text Version)

- | | | |
|------------------------|--------------------------|-------------------------|
| 1. Hair Root | 6. Hypodermis | 11. pore of sweat gland |
| 2. Hair Follicle | 7. Hair follicle | 12. sensory nerve fiber |
| 3. Eccrine Sweat Gland | 8. dermis | 13. sebaceous/oil gland |
| 4. Hair shaft | 9. epidermis | |
| 5. Adipose tissue | 10. arrector pili muscle | |

Integumentary System Anatomy of a Skin Cube



Layers of the Skin Diagram (Text Version)

This illustration shows a cross section of skin tissue. The outermost layer is called the _____[Blank 1] and occupies one fifth of the cross section. Several hairs are emerging from the surface. The epidermis dives around one of the hairs, forming a _____[Blank 2]. The _____[Blank 3] is located above the hair follicle. Surrounding the base of the hair follicle is the _____[Blank 4] which lubricates the _____[Blank 5]. Extending the surface of the skin is the _____[Blank 6]. The middle layer is called the _____[Blank 7], which occupies four fifths of the cross section. The dermis contains an _____[Blank 8] that causes contraction of the hair follicle making the hair stand on end such as when someone experiences goosebumps. The dermis also contains an _____[Blank 9], composed of a bunch of tubules. One tubule travels up from the bunch, through the epidermis, opening onto the surface a _____[Blank 10]. There are two string-like nerves travelling vertically through the dermis. The right nerve is attached to a Pacinian corpuscle, which is a yellow structure consisting of concentric ovals like an onion. The lowest level of the skin, the _____[Blank 11], contains _____[Blank 12], arteries, and veins. Blood vessels travel from the hypodermis and connect to hair follicles and erector pili muscle in the dermis. _____[Blank 13] located in the hypodermis supports the interpretation of touch.

Check your answers: ¹

Activity source: Layers of the Skin by Kimberlee Carter from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Consultation Report (Text Version)

INTEGUMENTARY SYSTEM – CONSULTATION REPORT

Fill in the consultation report with using the following words:

- Excisional
- Lesion
- Asymmetrical
- Mole
- Benign
- Biopsy
- Irregular

PATIENT NAME: Rosemary COOMBS

AGE: 54

Sex: Female

DOB: December 2

DATE OF CONSULTATION: May 29

REQUESTING PHYSICIAN: Trevor Sharpe, MD, Family Medicine

CONSULTING PHYSICIAN: Donna Brown, MD, Dermatology

HISTORY: This 54-year-old white female, went to her family doctor a year ago when she noticed a dark brown spot on her neck. The spot was a six cm, dark brown, flat _____[Blank 1] with smooth borders that appeared _____[Blank 2]. Ms. Coombs recently went to Dr. Sharpe for a physical and the _____[Blank 3] was examined, it was suggested that Ms. Coombs see me.

PAST HISTORY: No known history of any skin disorders.

PHYSICAL EXAMINATION: Normal except for the lesion on her chest which has grown to 1.3 cm in diameter and _____[Blank 4] in shape. It is mainly dark brown, with regions of darker black. The borders are _____[Blank 5] in outline. There is some blackened areas that are slightly elevated.

PLAN: I have booked a follow up appointment for next week to do an _____[Blank 6] biopsy. I will then send the specimen for a _____[Blank 7]. Another follow up appointment will be made once I receive the results of the biopsy.

Donna Brown, MD, Dermatology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

Activity source: Integumentary system – consultation report by Heather Scudder, licensed under CC BY 4.0./Text version added.

Fill in the Blanks

Practice filling in the blanks with the correct word parts.

Medical Terminology (Text version)

Fill in the spaces below with the following terms:

- Xero
- o
- hidr
- rhytid
- ous
- genic
- logist
- o
- ectomy
- derma
- cutane
- itis
- ous
- o
- al
- necr
- o
- o
- plasty
- sis
- phagia
- tone
- trans
- sub
- cutane
- dermat
- derma
- kerat
- aden
- auto
- derm
- per
- onych
- dermat

____[Blank 1a] / ____ [Blank 2a]/ ____[Blank 3a] / ____[Blank 4a] refers to the surgical repair of one's own skin.

Something that generates the production of epidermal tissues might be called ____[Blank 2a] / ____[Blank 2b] / ____[Blank 2b].

____[Blank 3a] / ____[Blank 3b] / ____[Blank 3c] refers to something in state of death.

____[Blank 4a] / ____[Blank 4b] / ____[Blank 4c] is a technical name for finger-biting.

____[Blank 5a] / ____[Blank 5b] / ____[Blank 5c] means pertaining to through the skin.

____[Blank 6a] / ____[Blank 6b] / ____[Blank 6c] injection is given under the skin.

During the winter months many people complain of ____[Blank 7a] / ____[Blank 7b] and use extra lotion.

A patch filled with medication, applied to the skin so that medication goes through the skin is referred to as a ____[Blank 8a] / ____[Blank 8b] / ____[Blank 8c] patch.

An instrument use to cut the skin for biopsy is referred to as a _____[Blank 9a] / _____[Blank 9b].

A specialist who studies and treats disorders and diseases of the skin is referred to as a _____[Blank 10a] / _____[Blank 10b] / _____[Blank 10b]/

The medical term that means a sweat gland is inflamed is _____[Blank 11a] / _____[Blank 11b] / _____[Blank 11c].

The medical term to excise wrinkles or commonly referred to as a facelift is _____[Blank 12a] / _____[Blank 12b].

Check your answers: ³

Activity source: Integumentary Medical Terms by Jesslyn Wilkinson, licensed under CC BY 4.0./Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Integumentary System Glossary Reinforcement Activity (Text version)

1. Cells that manufacture and store the protein keratin are called _____[Blank 1].
 - a. Scar
 - b. Vascularized
 - c. Keratinocytes
2. The outer layer of skin, made of closely packed epithelial cells are called_____ [Blank 2].
 - a. Fascia
 - b. Adipocytes
 - c. Epidermis
3. Specialized cells that produce melanin which is a dark pigment responsible for the colouration of skin and hair are called_____ [Blank 3].
 - a. Necrosis
 - b. Melanocytes
 - c. Keloid
4. Deepest layer of the epidermal is the _____[Blank 4].
 - a. Dermis
 - b. Fascia

- c. Stratum Basale
5. Production of cells that can mobilize and establish tumors in other organs of the body are called _____[Blank 5].
- a. Pathogens
 - b. Debridement
 - c. Metastasize

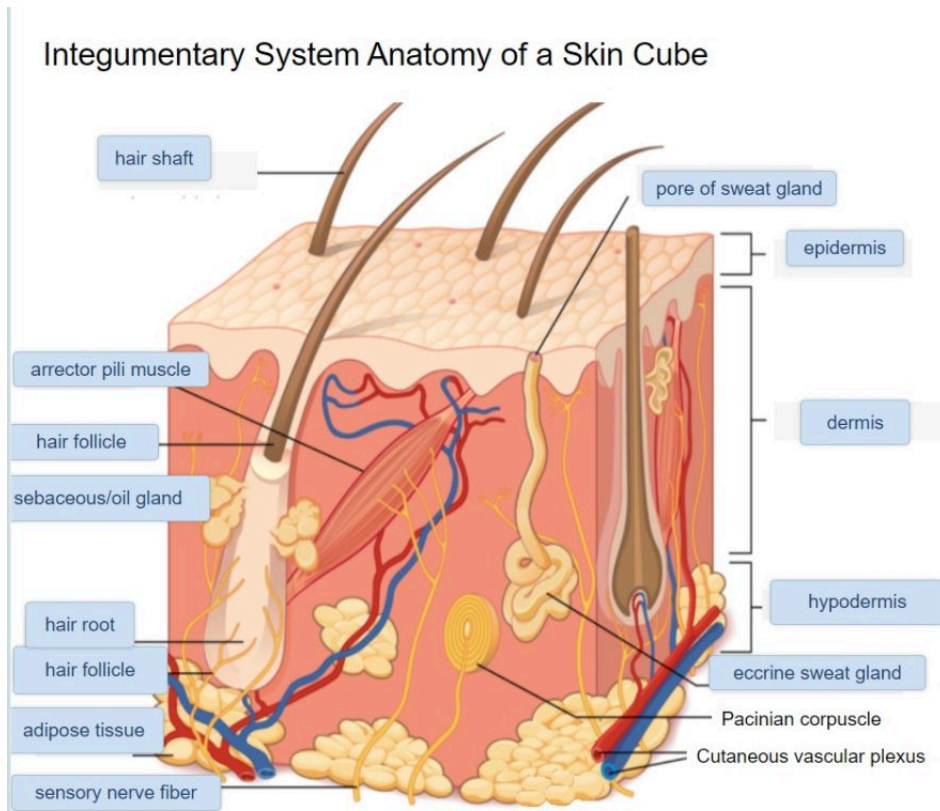
Check your answers: ⁴

Activity source: Integumentary System Glossary Reinforcement Activity by Gisele Tuzon and Kimberlee Carter, licensed under CC BY 4.0./Text version added.

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Notes



1.

Check your

answers: Layers of the Skin Diagram (Text Version) This illustration shows a cross section of skin tissue. The outermost layer is called the **epidermis** and occupies one fifth of the cross section. Several hairs are emerging from the surface. The epidermis dives around one of the hairs, forming a **hair follicle**. The **hair root** is located above the hair follicle. Surrounding the base of the hair follicle is the **sebaceous/oil gland** which lubricates the **hair follicle**. Extending the surface of the skin is the **hair shaft**. The middle layer is called the **dermis**, which occupies four fifths of the cross section. The dermis contains an **arrector pili muscle** that causes contraction of the hair follicle making the hair stand on end such as when someone experiences goosebumps. The dermis also contains an **eccrine sweat gland**, composed of a bunch of tubules. One tubule travels up from the bunch, through the epidermis, opening onto the surface a **pore of sweat gland**. There are two string-like nerves travelling vertically through the dermis. The right nerve is attached to a Pacinian corpuscle, which is a yellow structure consisting of concentric ovals like an onion. The lowest level of the skin, the **hypodermis**, contains **adipose tissue**, arteries, and veins. Blood vessels travel from the hypodermis and connect to hair follicles and erector pili muscle in the dermis. **Sensory nerve fibers** located in the hypodermis supports the interpretation of touch.

2. 1. Mole, 2. Benign, 3. Lesion, 4. Asymmetrical, 5. Irregular, 6. Excisional, 7. Biopsy

3. 1. Dermat /o /auto /plasty. 2. Kerat /o /genic. 3. Necr /o /sis. 4. Onych /o /phagia. 5. Per /cutane /ous. 6. Sub /cutane /ous. 7. Xero /derma. 8. Trans /derm /al. 9. Derma /tone. 10. Dermat /o /logist. 11. Hidr /aden /itis. 12. Rhytid /ectomy.

4. 1. Keratinocytes, 2. Epidermis, 3. Melanocytes, 4. Stratum Basale, 5. Metastasize

CHAPTER 4: RESPIRATORY SYSTEM

Respiratory System

If you would like to review the textbook chapter content, please visit **Chapter 4: Respiratory System** [New Tab].

Learning Objectives

- Identify the anatomy and describe the main functions of the respiratory system
- Analyze, translate, and define medical terms and common abbreviations of the respiratory system
- Practice the spelling and pronunciation of respiratory system terminology
- Identify the medical specialties associated with the respiratory system and explore common diseases, disorders, diagnostic testing and procedures related to the respiratory system

Key Word Components

Identify meanings of key word components of the respiratory system:

Prefixes

- a- (absence of, without)
- an- (absence of, without)
- brady- (slow)
- dys- (difficult, painful, abnormal, labored)
- endo- (within, in)
- eu- (normal, good)
- hyper- (above, excessive)
- hypo- (below, incomplete)

- intra- (within, in)
- poly- (many, much)
- tachy- (fast, rapid)

Combining Forms

- adenoid/o (adenoids)
- alveol/o (alveolus)
- atel/o (imperfect, incomplete)
- bronch/o (bronchus)
- bronchi/o (bronchus)
- capn/o (carbon dioxide)
- diaphragmat/o (diaphragm)
- epiglott/o (epiglottis)
- hem/o (blood)
- hemat/o (blood)
- laryng/o (larynx)
- lob/o (lobe)
- muc/o (mucus)
- nas/o (nose)
- orth/o (straight)
- ox/i (oxygen)
- pharyng/o (pharynx)
- phon/o (sound, voice)
- phren/o (diaphragm)
- pleur/o (pleura)
- pneum/o (lung, air)
- pneumon/o (lung, air)
- pneumat/o (lung)
- pulmon/o (lung)
- py/o (pus)
- radi/o (x-rays, ionizing radiation)
- respir/o (breath, breathing)
- rhin/o (nose)
- sept/o (septum)
- sinus/o (sinus)
- somn/o (sleep)
- son/o (sound)
- spir/o (breathe, breathing)
- thorac/o (thorax, chest cavity)
- tom/o (to cut, section, slice)
- tonsill/o (tonsil)
- trache/o (trachea)

Suffixes

- -algia (pain)
- -ar (pertaining to)
- -ary (pertaining to)
- -cele (hernia, protrusion)
- -centesis (surgical puncture to aspirate fluid)
- -eal (pertaining to)
- -ectasis (stretching out, dilation, expansion)
- -ectomy (excision, cut out)
- -emia (in the blood)
- -genic (producing, originating, causing)
- -gram (the record, radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording, radiographic imaging)
- -ia (condition, diseased state, abnormal state)
- -ic (pertaining to)
- -itis (inflammation)
- -logist (specialist or physician who studies and treats)
- -logy (study of)
- -meter (instrument used to measure)
- -metry (measurement)
- -oid (resembling)
- -pexy (surgical fixation, suspension)
- -plasty (surgical repair)
- -pnea (breathing)
- -ptysis (spitting, coughing)
- -rrhagia (rapid flow of blood, excessive bleeding)
- -scope (instrument used for visual examination)
- -scopic (pertaining to visual examination)
- -scopy (process of visually examining, visual examination)
- -spasm (sudden involuntary muscle contraction, spasmodic contraction)
- -stenosis (constriction, narrowing)
- -stomy (creation of an artificial opening)
- -thorax (chest, chest cavity)
- -tome (instrument used to cut)
- -tomy (cut into, incision)

Respiratory System Words

Respiratory System Medical Terms (Text version)

1. Adenoiditis

- adenoid/itis
- inflammation of the adenoids

2. adenoidectomy

- adenoid/ectomy
- excision of the adenoids

3. adenotome

- aden/o/tome
- instrument used to cut the adenoids

4. alveolitis

- alveol/itis
- inflammation of the alveoli

5. alveolar

- alveol/ar
- pertaining to the alveolus

6. atelectasis

- atel/ectasis
- incomplete expansion

7. bronchitis

- bronch/itis
- inflammation of the bronchus

8. bronchogenic carcinoma

- bronch/o/genic carcin/oma
- cancerous tumour originating in a bronchus (lung cancer)

9. bronchopneumonia

- bronch/o/pneumon/ia

- diseased state of bronchi and lungs

10. **bronchoplasty**

- bronch/o/plasty
- surgical repair of the bronchi

11. **bronchoscope**

- bronch/o/scope
- instrument used for visual examination of the bronchi

12. **bronchoscopy**

- bronch/o/scopy
- visual examination of the bronchi

13. **bronchoalveolar**

- bronch/o/alveol/ar
- pertaining to the bronchi and alveoli

14. **bronchospasm**

- bronch/o/spasm
- spasmodic contraction of the bronchi

15. **bronchiectasis**

- bronchi/ectasis
- dilation of the bronchi

16. **capnometer**

- capn/o/meter
- instrument used to measure carbon dioxide

17. **acapnia**

- a/capn/ia
- condition of absence (less than normal level) of carbon dioxide (in the blood)

18. **hypercapnia**

- hyper/capn/ia
- condition of excessive (greater than normal levels) carbon dioxide (in the blood)

19. **hypocapnia**

- hypo/capn/ia
- condition of deficient (low levels) of carbon dioxide (in the blood)

20. **diaphragmatocele**

- diaphragmat/o/cele
- hernia of the diaphragm

21. **diaphragmatic**

- diaphragmat/ic
- pertaining to the diaphragm

22. **epiglottitis**

- epiglott/itis
- inflammation of the epiglottis

23. **hemothorax**

- hem/o/thorax
- blood in the thoracic cavity

24. **hematology**

- hemat/o/logy
- study of blood

25. **hematologist**

- hemat/o/logist
- specialist in blood and blood disorders

26. **laryngotracheobronchitis (LTB)**

- laryng/o/trache/o/bronch/itis
- inflammation of the larynx, trachea, and bronchi

27. **laryngoplasty**

- laryng/o/plasty
- surgical repair of the larynx

28. **laryngostomy**

- laryng/o/stomy
- creation of an artificial opening into the larynx

29. **laryngotracheotomy**

- laryng/o/trache/o/tomy
- incision into the larynx and trachea

30. **laryngoscope**

- laryng/o/scope
- instrument used for visual examination of the larynx

31. **laryngoscopy**

- laryng/o/scopy
- process of viewing the larynx

32. **laryngeal**

- laryng/eal
- pertaining to the larynx

33. **laryngospasm**

- laryng/o/spasm
- spasmodic contraction of the larynx

34. **laryngitis**

- laryng/itis
- inflammation of the larynx

35. **lobar pneumonia**

- lob/ar pneumon/ia
- disease state of the lung pertaining to the lobe(s)

36. **lobectomy**

- lob/ectomy
- excision of the lobe(s)

37. **muroid**

- muc/oid
- resembling mucus

38. **mucous**

- muc/ous
- pertaining to mucus

39. **nasopharyngitis**

- nas/o/pharyng/itis
- inflammation of the nose and pharynx

40. **nasopharyngeal**

- nas/o/pharyng/eal
- pertaining to the nose and pharynx

41. **orthopnea**

- orth/o/pnea
- breathing is easier in a straight position

42. **anoxia**

- an/ox/ia
- condition of absence (deficiency) of oxygen

43. **oximeter**

- oxi/meter
- instrument used to measure oxygen

44. **hypoxemia**

- hyp/ox/emia
- condition of deficient oxygen in the blood

45. **hypoxia**

- hyp/ox/ia
- condition of deficient oxygen

46. **pharyngitis**

- pharyng/itis
- inflammation of the pharynx

47. **aphonia**

- a/phon/ia
- condition of absence of voice

48. **dysphonia**

- dys/phon/ia
- condition of difficult speaking (voice)

49. **phrenalgia**

- phren/algia
- pain in the diaphragm

50. **phrenospasm**

- phren/o/spasm
- spasm of the diaphragm

51. **pleuritic**

- pleurit/ic
- pertaining to the pleura

52. **pleuritis**

- pleur/itis
- inflammation of the pleura

53. **pleuropexy**

- pleur/o/pexy
- surgical fixation of the pleura

54. **interpleural**

- inter/pleur/al
- pertaining to between the pleura (space between the pleural membranes)

55. **pneumoconiosis**

- pneum/o/coni/osis
- abnormal condition of dust in the lungs

56. **pneumonia**

- pneumon/ia
- diseased state of lung

57. **pneumonitis**

- pneumon/itis
- inflammation of the lung

58. **pneumothorax**

- pneum/o/thorax
- air in the thoracic cavity

59. **pneumonectomy**

- pneumon/ectomy
- excision of the lung

60. **pneumatocele**

- pneumat/o/cele
- hernia of the lung

61. **pulmonary**

- pulmon/ary
- pertaining to the lung(s)

62. **pyothorax**

- py/o/thorax
- pus in the thoracic cavity

63. **radiography**

- radi/o/graphy
- process of recording x-rays

64. **radiologist**

- radi/o/logist
- physician who specializes in the diagnosis and treatment of disease using medical imaging

65. **radiology**

- radi/o/logy
- study of the use of radiant energy in diagnosing disease

66. **respirologist**

- respir/o/logist
- specialist who studies and treats disease and disorders related to breathing

67. **respirology**

- respir/o/logy
- the study of breathing disorders and disease

68. **rhinitis**

- rhin/itis
- inflammation of the nose

69. **rhinomycosis**

- rhin/o/myc/osis
- abnormal condition of fungus in the nose

70. **rhinorrhagia**

- rhin/o/rrhagia
- rapid flow of blood from the nose

71. **rhinoplasty**

- rhin/o/plasty
- surgical repair of the nose

72. **rhinorrhea**

- rhin/o/rrhea
- discharge from the nose

73. **septoplasty**

- sept/o/plasty
- surgical repair of the septum

74. **septotomy**

- sept/o/tomy
- incision into the (nasal) septum

75. **sinusitis**

- sinus/itis
- inflammation of a sinus

76. **polysomnography (PSG)**

- poly/somn/o/graphy
- process of recording many (test) during sleep

77. **sonogram**

- son/o/gram
- the record of sound

78. **sonography**

- son/o/graphy
- process of recording sound

79. **spirometer**

- spir/o/meter
- instrument used to measure breathing (lung volume)

80. **spirometry**

- spir/o/metry
- measuring breathing (air flow)

81. **thoracalgia**

- thorac/algia
- pain in the chest, thorax

82. **thoracocentesis**

- thorac/o/centesis
- surgical puncture to aspirate fluid (from the thoracic cavity)

83. **thoracentesis**

- thora/centesis
- surgical puncture to aspirate fluid from thoracic cavity

84. **thoracotomy**

- thorac/o/tomy
- incision into the thoracic cavity

85. **thoracoscopy**

- thorac/o/scopy
- visual examination of the thoracic cavity

86. **thoracic**

- thorac/ic
- pertaining to the chest, thorax

87. **thoracoscope**

- thorac/o/scope
- instrument used to visualize the thoracic cavity

88. **tomography**

- tom/o/graphy
- process of recording slices

89. **tonsillitis**

- tonsill/itis
- inflammation of the tonsils

90. **tonsillectomy**

- tonsill/ectomy
- excision of the tonsils

91. **tracheitis**

- trache/itis
- inflammation of the trachea

92. **tracheoplasty**

- trache/o/plasty
- surgical repair of the trachea

93. **tracheostomy**

- trache/o/stomy
- creation of an artificial opening into the trachea

94. **tracheotomy**

- trache/o/tomy
- incision into the trachea

95. **endotracheal**

- endo/trach/eal
- pertaining to within the trachea

96. **tracheostenosis**

- trache/o/stenosis
- narrowing of the trachea

97. **endoscope**

- endo/scope
- instrument used to view within (a hollow organ or cavity)

98. **endoscopic**

- endo/scopic
- pertaining to view within (a hollow organ or cavity)

99. **endoscopy**

- endo/scopy
- visual examination within (a hollow organ or cavity)

100. **apnea**

- a/pnea
- absence of breathing

101. **dyspnea**

- dys/pnea
- breathing that is difficult

102. **eupnea**

- eu/pnea
- normal breathing

103. **hypopnea**

- hypo/pnea
- deficient breathing

104. **tachypnea**

- tachy/pnea
- rapid breathing

Activity Source: Respiratory System Medical Terms by Kimberlee Carter, licensed under CC BY 4.0./Text version added.

Pronouncing and Defining Respiratory System Medical Terms

Respiratory System Word Not Easily Broken Down (Text version)

1. **Epistaxis**
 - nosebleed (rhinorrhagia)
2. **influenza (flu)**
 - highly contagious viral infection effecting the respiratory tract
3. **pleural effusion**
 - fluid in the pleural space
(caused by disease or trauma)
4. **pulmonary edema**
 - fluid accumulation in alveoli and bronchioles
(related to heart failure)
5. **pulmonary embolism (PE)**
 - blockage of pulmonary circulation to the lungs
6. **upper respiratory infection**
 - infection of the nasal cavity, sinuses, pharynx and larynx
7. **stethoscope**
 - instrument used to hear internal body sounds
8. **asphyxia**
 - deprivation of oxygen to tissues, suffocation
9. **aspirate**
 - suction of fluid, inhalation of fluid
10. **mucus**
 - slimy liquid secreted by mucous membranes
11. **nebulizer**
 - device that creates a mist for giving respiratory treatment or medication
12. **nosocomial infection**

- infection acquired in hospital

13. **sputum**

- mucous secretion from lungs, bronchi, and trachea that is expelled through the mouth

14. **ventilator**

- mechanical device that assist with breathing

Activity Source: Respiratory System Word Not Easily Broken Down by Kimberlee Carter, licensed under CC BY 4.0./ Text version added.

Pronouncing and Defining Commonly Abbreviated Respiratory System Terms

Practice pronouncing and defining these commonly abbreviated respiratory system terms:

- ABGs (arterial blood gases)
- AFB (acid-fast bacilli)
- ARDS (acute respiratory distress syndrome)
- BiPAP (bilevel positive airway pressure)
- C&S (culture and sensitivity)
- CAP (community-acquired pneumonia)
- CF (cystic fibrosis)
- CO₂ (carbon dioxide)
- COPD (chronic obstructive pulmonary disease)
- CPAP (continuous positive airway pressure)
- CPT (chest physiotherapy)
- CT (computed tomography, computerized tomography)
- CXR (chest x-ray)
- DPI (dry powder inhaler)
- flu (influenza)
- IPPB (intermittent positive-pressure breathing)
- IPF (idiopathic pulmonary fibrosis)
- LLL (left lower lobe)
- LTB (laryngotracheobronchitis)
- LUL (left lower lobe)
- MDI (metered-dose inhaler)
- NIPPV (non-invasive positive-pressure ventilator)
- O₂ (oxygen)

- OSA (obstructive sleep apnea)
- PEP (positive expiratory pressure)
- PFM (peak flow meter)
- PFTs (pulmonary function tests)
- RLL (right lower lobe)
- RML (right middle lobe)
- RUL (right upper lobe)
- SOB (shortness of breath)
- SVN (small-volume nebulizer)
- TB (tuberculosis)
- URI (upper respiratory infection)
- VAP (ventilator-associated pneumonia)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Respiratory System Structures

Label the following respiratory system structures:

Labeling the Respiratory System (Text Version)

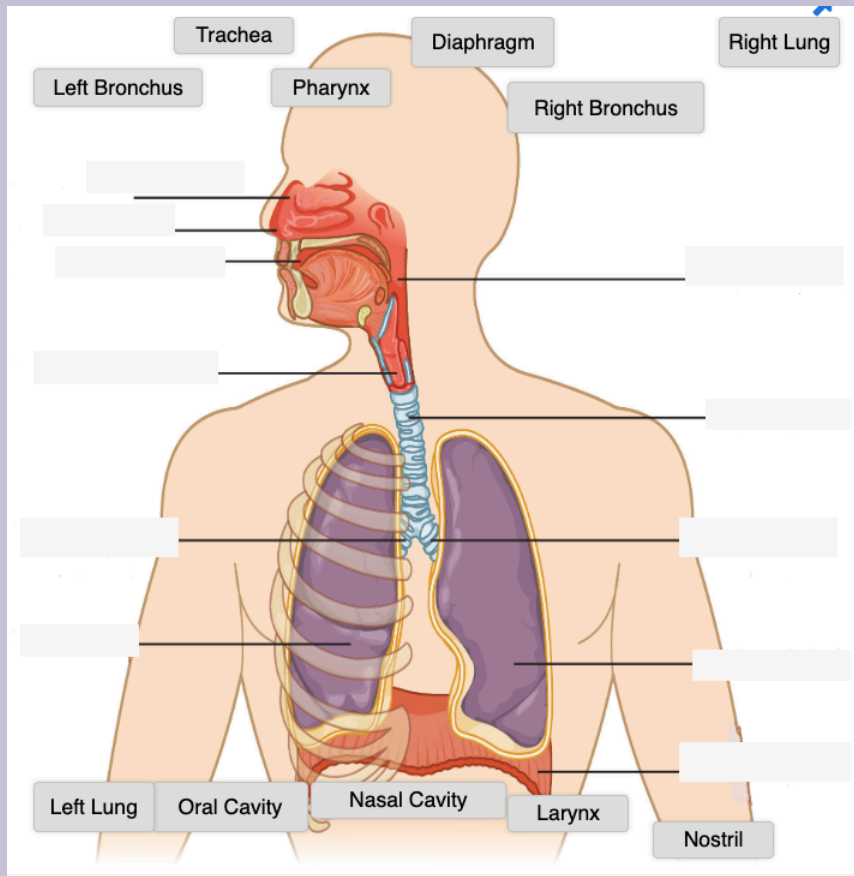
Label the diagram with correct words listed below:

1. Left Bronchus
2. Trachea
3. Pharynx

4. Diaphragm
5. Right Bronchus
6. Right Lung

7. Left Lung
8. Oral Cavity
9. Nasal Cavity

10. Larynx
11. Nostril



Labeling the Respiratory System Diagram (Text version)

This is an anatomical diagram of the major organs and structure of the human respiratory system. Identified starting from the top of the diagram is the organs and structures which serve as a passageway for air and include, _____[Blank 1] which warms and moistens the air, the _____[Blank 2] where air enters the respiratory system and travels to the _____[Blank 3] also know as the mouth, from the mouth the air moves to the _____[Blank 4], then to through the voice box correctly called the _____[Blank 5], and passes into the _____[Blank 6] often referred to as the windpipe. The trachea bifurcates meaning it separates into two anatomical branches each leading to each lung, on the right side is the _____[Blank 7], on the left side, the _____[Blank 8]. Air arrives at the lungs to allow for the exchange of gases arrives and enters on the right side into the _____[Blank 9] and on the left side the _____[Blank 10]. The muscular partition supporting the lungs known as the _____[Blank 11]. This detailed illustration supports understanding of the respiratory system's structure and function.

Check your answers: ¹

Activity source: Respiratory System Anatomy by Kimberlee Carter, illustration from *Anatomy and Physiology* (OpenStax), licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Respiratory System History and Physical (Text Version)

Fill in the consultation report with correct words listed below:

- Exert
- Edema
- diuretic
- membranes
- HEENT
- apnea
- heart failure
- lobes
- inspiration
- allergens
- breath
- erythema
- monitor
- asthma
- edema

RESPIRATORY SYSTEM – HISTORY & PHYSICAL EXAMINATION

PATIENT NAME: Randy BURNS

AGE: 56

DOB: July 2

SEX: Male

ATTENDING PHYSICIAN: Joyce Mathers, MD, Pulmonology

HISTORY: This 56-year-old male is presenting with a 2-week history of worsening dyspnea not associated with exertion. The patient states that he does not have to _____[Blank 1] himself for his breathing to get difficult. He feels that “he cannot get his breath” sometimes even with lying in bed. He does report developing a cold and runny nose over the last 10 days, but the worsened breathing seemed to have started a few days earlier than this. He reports that the shortness of _____[Blank 2] has progressively gotten worse in the past 2-3 days. Patient does not report any leg or foot _____[Blank 3].

PAST HISTORY: The patient has a life history of asthma triggered by environmental _____[Blank 4] – grass cutting, trees budding in the spring, street dust etc. He has used a puffer when he has symptoms since he was a child. He has a history of congestive _____[Blank 5] (CHF) and sleep _____[Blank 6] for which he uses a CPAP machine nightly.

PHYSICAL EXAMINATION: GENERAL APPEARANCE: The patient appears laboring in breathing. He is quite distressed. VITAL SIGNS: Temperature 97.1, pulse 88, blood pressure 121/86, weight 209 pounds, height 5 feet 8 inches. _____[Blank 7]: Eye exam PERRLA. Normocephalic, atraumatic. Moist mucous _____[Blank 8]. No oropharyngeal _____[Blank 9]. No signs of infection. Tongue is coated but tonsils are clear. NECK: Supple. No lymphadenopathy. No bruits. LUNGS: There is marked wheezing on _____[Blank 10] bilaterally. Some minimal evidence of consolidation in the lower _____[Blank 11] bilaterally. No rales or rubs. CARDIAC: Irregular rate and rhythm, variable S1 and S2. EXTREMITIES: Some pedal and ankle _____[Blank 12] noted in low extremities. No cyanosis or clubbing.

ASSESSMENT AND PLAN

1. Acute shortness of breath with a history of allergic _____[Blank 13]. Rule out upper respiratory infection (URI). Will order chest x-ray stat.

2. Atrial fibrillation. Patient has a controlled rate. Will administer one dose of Lovenox overnight.
3. Mild symptoms of CHF due to lower extremity edema. Will administer Aldactone to bring this under control. Will _____[Blank 14] the patient's diuretic volume.
4. Plan to admit patient overnight for observation to await stat CXR result and to monitor the effects of _____[Blank 15] and anticoagulant therapies.

 Joyce Mathers, MD, Pulmonology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

Activity source: Respiratory System History and Physical by Sheila Bellefeuille and Heather Scudder, licensed under CC BY 4.0. / Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Respiratory System Consultation Report (Text Version)

Fill in the consultation report with correct words listed below:

- | | | |
|--------------|----------------|---------------|
| • Oxygen | • dyspnea | • antibiotics |
| • pleura | • thoracostomy | • wheezing |
| • basal | • q. d. | • atelectasis |
| • hemoptysis | • COPD | |

RESPIRATORY SYSTEM – CONSULTATION REPORT

PATIENT NAME: Wayne SAUNDERS

AGE: 59

DOB: September 7

SEX: Male

DATE OF CONSULTATION: March 29

CONSULTANT: Joyce Mathers, MD, Pulmonology

REASON FOR CONSULTATION: Sudden onset dyspnea and respiratory distress.

HISTORY: This garrulous 59-year-old was seen in the ER today with a complaint of sudden onset _____[Blank 1] and some respiratory distress. Denies any nausea, vomiting, chest pain, _____[Blank 2], cough, fever or chills.

PAST HISTORY: Is positive for asthma and _____[Blank 3] as patient is a lifelong smoker at 1+ packs per day.

ASSESSMENT: CHEST has good air entry bilaterally. No _____[Blank 4]. Bilateral _____[Blank 5] crackles are noted. Some dullness to percussion on the left. CT scan was ordered and shows a left _____ [Blank 6] effusion and acute pneumothorax due to infectious process. Probable comprehensive _____[Blank 7].

MEDICATIONS

1. Adalat 30 mg _____[Blank 8].
2. Atenolol 50 mg (half dose) q.d.
3. Flonase 50 mcg one spray on each side q.d.
4. Zolofl 100 mg once q.d.

PLAN

1. Admit patient to the unit for treatment and possible left _____[Blank 9] if indicated by lack of improvement on standard therapy.
2. Treat with a course of _____[Blank 10] for the URI.
3. _____[Blank 11] therapy if indicated by O2 sats.
4. Repeat CT scan in 48 hours.

Joyce Mathers, MD, Pulmonology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDl) formatting standards.

Check your answers: ³

Activity source: Respiratory System Consultation Report by Sheila Bellefeuille and Heather Scudder, licensed under CC BY 4.0. / Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Respiratory System Consultation Report (Text Version)

Fill in the consultation report with correct words listed below:

- Kidney
- respiratory
- childhood
- urinalysis
- shadowing
- mid-thoracic
- pulmonary
- hepatotoxic
- x-ray
- apex
- dyspnea
- flu shot
- myoplasmal
- rasping
- rhinorrhea
- expiration
- rales
- vaccine

RESPIRATORY SYSTEM – CONSULTATION REPORT

PATIENT NAME: Mateo DIAZ

AGE: 22

DOB: June 25

SEX: Male

DATE OF CONSULTATION: April 16

CONSULTING PHYSICIAN: Joyce Mathers, MD Pulmonology

HISTORY: This 22-year-old Hispanic gentleman is referred to me for a 2-week history of new rasping cough associated with a dull right _____[Blank 1] intercostal discomfort. He has some associated _____[Blank 2] on exertion but is otherwise well with no presenting symptoms of a cold or _____[Blank 3] infection. No fever, sputum or _____[Blank 4].

PAST HISTORY: He has a history of _____[Blank 5] asthma that seemed to disappear after he hit his mid-20s. He has a history of extensive travel for work and leisure and most recently was on a work trip to Wuhan, China in late December. He receives a _____[Blank 6] annually and did have the most recent _____[Blank 7] in October 2019.

His physical exam is relatively unremarkable. Blood pressure is 120/83, respirations 12. Temperature normal at 37. Chest exam is CTA with no _____[Blank 8], rhonchi or wheezes. Even on a forced exhalation, we could not reproduce the _____[Blank 9] cough symptom.

ASSESSMENT: A PA and lateral chest _____[Blank 10] revealed a new infiltrate and _____[Blank 11] along the left mid-lung margin all the way to the _____[Blank 12]. Spirometry showed normal pressures on forced _____[Blank 13].

PLAN

1. Rule out _____[Blank 14] pneumonia versus other lung infection or infiltrates such as granulomatosis, aspergillosis or sarcoidosis.
2. CBC with differential, chem panel, ESR, ACE, and mycoplasma titres.
3. Repeat full function tests (PFTs) in 2 weeks.

If required, will treat with Amphotericin B, Tosufloxacin, Macrolide or similar. If any of these treatments are indicated, weekly LFTs and _____[Blank 15] function testing will be required as these classes of drugs is notoriously _____[Blank 16] and nephrotoxic.

I will see the patient again in approximately 4 days to review the results and decide on a course of action – more testing or appropriate treatments as indicated above.

Joyce Mathers, MD Pulmonology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ⁴

Activity source: Respiratory System Consultation Report by Sheila Bellefeuille and Heather Scudder, licensed under CC BY 4.0. / Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Respiratory System Glossary Reinforcement Activity (Text Version)

1. A small bulbous, teardrop-shaped structure located at the apex of the soft palate is called the _____[Blank 1].
 - a. Lymphocytes
 - b. Posterior
 - c. Uvula
2. Located at the anterior region of the nasal cavity and is composed of bone is the _____[Blank 2].
 - a. Glottis
 - b. Fauces
 - c. Hard Palate
3. A ridge of cartilage that separates the two main bronchi is called the _____[Blank 3].
 - a. Carina

- b. Eupnea
 - c. Alveolar Duct
4. _____[Blank 4] serves as an airway and is continuous with the nasal cavity.
- a. Conducting zone
 - b. Nasopharynx
 - c. Hilum
5. _____[Blank 5] consists of the surface and skeletal structure that result in the outward appearance of the nose and contribute to its numerous functions.
- a. Pharynx
 - b. Inferior
 - c. External nose

Check your answers: ⁵

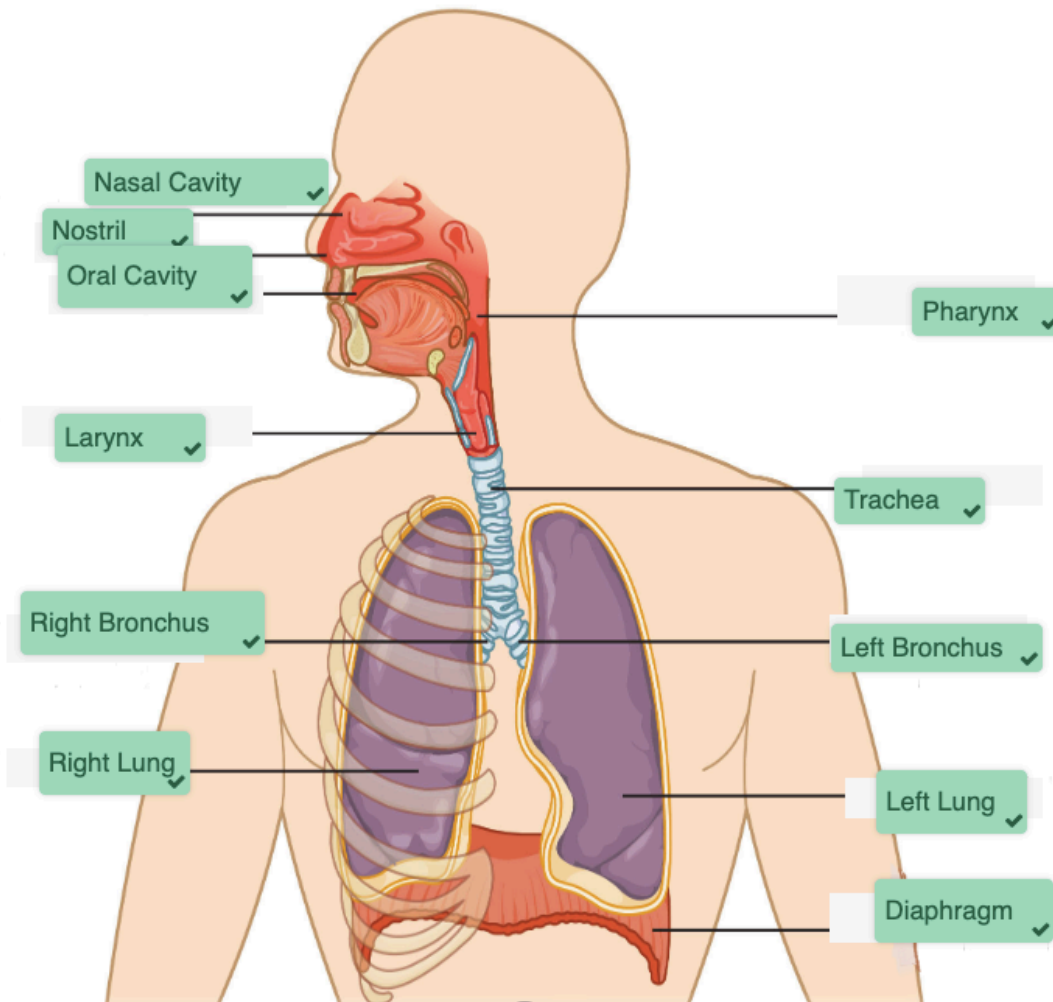
Activity source: Respiratory System Glossary Reinforcement Activity by Gisele Tuzon, licensed under CC BY 4.0./Text version added.

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Notes

Respiratory System Anatomy



1. **Check your answers: Labeling the Respiratory System Diagram** This is an anatomical diagram of the major organs and structure of the human respiratory system. Identified starting from the top of the diagram is the organs and structures which serve as a passageway for air and include, **nasal cavity** which warms and moistens the air, the **nostril** where air enters the respiratory system and travels to the **oral cavity** also know as the mouth, from the mouth the air moves to the **pharynx**, then to through the voice box correctly called the **larynx**, and passes into the **trachea** often referred to as the windpipe. The trachea bifurcates meaning it separates into two anatomical branches each leading to each lung, on the right side is the **right main bronchus** branch, on the left side, the **left main bronchus**. Air arrives at the lungs to allow for the exchange of gases arrives and enters on the right side into the **right lung** and on the left side the **left lung**. The muscular partition supporting the lungs known as the **diaphragm**. This detailed illustration supports understanding of the respiratory system's structure and function.
2. 1. Exert, 2. Breath, 3. Edema, 4. Allergens, 5. Heart failure, 6. Apnea, 7. HEENT, 8. Membranes, 9. Erythema, 10. Inspiration, 11. Lobes, 12. Edema, 13. Asthma, 14. Monitor, 15. Diuretic
3. 1. Dyspnea, 2. Hemoptysis, 3. COPD, 4. Wheezing, 5. Basal, 6. Pleural, 7. atelectasis , 8. q. d., 9. Thoracostomy, 10. Antibiotics, 11. Oxygen
4. 1. Mid-thoracic, 2. Dyspnea, 3. Respiratory, 4. Rhinorrhea, 5. Childhood, 6. Flu-shot, 7. Vaccine, 8. Rales, 9. Rasping, 10. X-ray, 11. Shadowing, 12. Apex, 13. Expiration, 14. Myoplasmal, 15. Urinalysis, 16. Pulmonary, 17. Kidney, 18. Hepatotoxic.
5. 1. Uvula, 2. Hard Palate, 3. Carina, 4. Nasopharynx, 5. External nose

CHAPTER 5: URINARY SYSTEM

Urinary System

If you would like to review the textbook chapter content, please visit [Chapter 5: Urinary System \[New Tab\]](#).

Learning Objectives

- Identify the anatomy and describe the main functions of the urinary system
- Analyze, translate, and define medical terms and common abbreviations of the urinary system
- Practice the spelling and pronunciation of urinary system medical terminology
- Identify the medical specialties associated with the urinary system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the urinary system:

Prefixes

- a- (absence of, without)
- an- (absence of, without)
- dia- (through, complete)
- dys- (painful, abnormal, difficult, labored)
- poly- (many, much)

Combining Forms

- albumin/o (albumin)
- azot/o (urea, nitrogen)
- blast/o (developing cell, germ cell)
- cyst/o (bladder, sac)
- glomerul/o (glomerulus)
- glyc/o (sugar)
- glycos/o (sugar)
- hydr/o (water)
- lith/o (stone, calculus)
- meat/o (meatus)
- nephr/o (kidney)
- noct/i (night)
- olig/o (few, scanty)
- pyel/o (renal pelvis)
- py/o (pus)
- ren/o (kidney)
- ureter/o (ureter)
- urethr/o (urethra)
- urin/o (urine, urinary tract)
- ur/o (urine, urinary tract)
- vesic/o (bladder, sac)

Suffixes

- -al (pertaining to)
- -ary (pertaining to)
- -cele (hernia, protrusion)
- -emia (in the blood)
- -gram (the recorded radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording, radiographic imaging)
- -iasis (condition)
- -esis (condition)
- -itis (inflammation)
- -lith (stone)
- -lysis (loosening, dissolution, separating)
- -megaly (enlarged, enlargement)
- -oma (tumour, swelling)

- -osis (abnormal condition)
- -pexy (surgical fixation, suspension)
- -ptosis (drooping, sagging, prolapse)
- -rrhaphy (suturing, repairing)
- -scope (instrument used for visual examination)
- -scopic (pertaining to visual examination)
- -scopy (visual examination)
- -stomy (creation of an artificial opening)
- -tomy (cut into, incision)
- -tripsy (surgical crushing)
- -uria (urine, urination)

Urinary System Words

Urinary System Medical Terms

1. **albuminuria**

- albumin/uria
- albumin in the urine

2. **azotemia**

- azot/emia
- urea in the blood

3. **cystectomy**

- cyst/ectomy
- excision of the bladder

4. **cystolithotomy**

- cyst/o/lith/o/tomy
- incision into the bladder to remove stone(s)

5. **cystorrhaphy**

- cyst/o/rrhaphy
- suturing the bladder

6. **cystostomy**

- cyst/o/stomy
- creation of an artificial opening into the bladder

7. **cystotomy**

- cyst/o/tomy
- incision into the bladder

8. **cystogram**

- cyst/o/gram
- radiographic image of the bladder

9. **cystography**

- cyst/o/graphy
- radiographic imaging of the bladder

10. **cystoscope**

- cyst/o/scope
- instrument used for visual examination of the bladder

11. **cystoscopy**

- cyst/o/scopy
- visual examination of the bladder

12. **cystitis**

- cyst/itis
- inflammation of the bladder

13. **cystocele**

- cyst/o/cele
- protrusion of the bladder

14. **cystolith**

- cyst/o/lith
- stone(s) in the bladder

15. **glomerulonephritis**

- glomerul/o/nephr/itis
- inflammation of the glomeruli of the kidney

16. **glycosuria**

- glycos/uria
- sugar (glucose) in the urine

17. **hydronephrosis**

- hydro/nephr/osis
- abnormal condition of water in the kidney

18. **lithotripsy**

- lith/o/tripsy
- surgical crushing of stone(s)

19. **meatotomy**

- meat/o/tomy
- incision into the meatus

20. **meatal**

- meat/al
- pertaining to the meatus

21. **nephritis**

- nephr/itis
- inflammation of the kidney

22. **nephrolithiasis**

- nephr/o/lith/iasis
- condition of stone(s) in the kidney

23. **nephroma**

- nephr/oma
- tumour of kidney

24. **nephromegaly**

- nephr/o/megaly
- enlarged kidney

25. **nephroptosis**

- nephr/o/ptosis
- drooping kidney

26. **nephrectomy**

- nephr/ectomy
- excision of the kidney

27. **nephrolitotomy**

- nephr/o/lith/o/tomy
- incision into the kidney to remove stone(s)

28. **nephrolithotripsy**

- nephr/o/lith/o/tripsy
- surgical crushing of stone(s) in the kidney

29. **nephrolysis**

- nephr/o/lysis
- separating the kidney (from body structures)

30. **nephropexy**

- nephr/o/pexy
- surgical fixation of the kidney

31. **nephrostomy**

- nephr/o/stomy
- creation of an artificial opening into the kidney

32. **nephrography**

- nephr/o/graphy
- radiographic imaging of the kidney

33. **nephroscopy**

- nephr/o/scopy
- process of viewing the kidney

34. **nephrosonography**

- nephr/o/son/o/graphy
- process of recording the kidney using sound

35. **nephrologist**

- nephr/o/logist
- specialist who studies and treats disease and disorders of the kidney

36. **nephrology**

- nephr/o/logy
- study of the kidney

37. **nocturia**

- noct/uria
- night urination

38. **oliguria**

- olig/uria
- scanty urine (output)

39. **pyelitis**

- pyel/itis
- inflammation of the renal pelvis

40. **pyelonephritis**

- pyel/o/nephr/itis
- inflammation of the renal pelvis and the kidney

41. **pyelolithotomy**

- pyel/o/lith/o/tomy
- incision into the renal pelvis

42. **pyeloplasty**

- pyel/o/plasty
- surgical repair of the renal pelvis

43. **renogram**

- ren/o/gram
- radiographic record of the kidney

44. **ureteritis**

- ureter/itis
- inflammation of the ureter

45. **ureterectomy**

- ureter/ectomy
- excision of the ureter

46. **ureterostomy**

- ureter/o/stomy
- creation of an artificial opening into the ureter

47. **ureterocele**

- ureter/o/cele
- protrusion of a ureter

48. **ureterolithiasis**

- ureter/o/lith/iasis
- condition of stone(s) in the ureter

49. **ureterostenosis**

- ureter/o/stenosis
- narrowing of the ureter

50. **ureteroscopy**

- ureter/o/scopy
- visual examination of the ureter(s)

51. **urethrocystitis**

- urethr/o/cyst/itis
- inflammation of the urethra and the bladder

52. **anuria**

- an/uria
- absence of urine

53. **diuresis**

- di/ur/esis
- condition of urine passing through (increased excretion of urine)

54. **dysuria**

- dys/uria
- difficult or painful urine

55. **urinary**

- urin/ary
- pertaining to urine

56. **retrograde urogram**

- retrograde ur/o/gram
- radiographic image of the urinary tract

57. **ureteroscopy**

- ureter/o/scopy
- visual examination of the ureter(s)

58. **urogram**

- ur/o/gram
- radiographic image of the urinary tract

59. **hematuria**

- hemat/uria
- blood in the urine

60. **polyuria**

- poly/uria
- excessive urine

61. **pyuria**

- py/uria
- pus in the urine

62. **urinary**

- urin/ary
- pertaining to urine

63. **urologist**

- ur/o/logist
- physician who studies and treats diseases of the urinary tract

64. **urology**

- ur/o/logy
- study of the urinary tract

65. **vesicotomy**

- vesic/o/tomy
- incision into the bladder

Activity Source: Urinary System Medical Terms by Kimberlee Carter, from *Building a Medical Terminology Foundation*, licensed under CC BY 4.0./ Text version added.

Pronouncing and Defining Urinary System Medical Terms

Urinary System Medical Terms Not Easily Broken into Word Parts (Text version)

1. **deamination**

- dē-am-ĭ-NĀ-shŏn
- The removal of an amino group from a molecule.

2. **distended**

- dis-TEN-ded (Original Term)
- stretch out

3. **enuresis**

- en-ū-RĒ-sīs (Original Term)
- involuntary urination

4. **hemodialysis (HD)**

- hē-mō-dī-ĀL-ī-sīs
- procedure for removing impurities from the blood due to an inability of the kidney to function

5. **hydrostatic**

- hī-drō-STAT-ik
- Relating to the equilibrium of liquids and the pressure exerted by liquid at rest

6. **incontinence**

- in-KONT-īn-ěns (Original Term)
- inability to control the bladder and/or bowels

7. **micturate**

- MĪK-tū-rāt (Original Term)
- to pass urine

8. **sphincter**

- SFĪNK-tēr
- A circular muscle constricting an orifice

9. **stricture**

- STRIK-chūr (Original Term)
- abnormal narrowing

10. **urinal**

- Ū-rĭn-āl (Original Term)
- receptacle for urine

11. **void**

- VOYD (Original Term)
- empty or evacuate waste material, urinate

Activity Source: Urinary System Medical Terms not easily broken into word parts from *Medical Terminology*. by Grimm et al., licensed under CC BY 4.0. / Some H5P audio re-recorded by David McCuaig and text version added.

Pronouncing and Defining Commonly Abbreviated Urinary System Terms

Practice pronouncing and defining these commonly abbreviated urinary system terms:

- ARF (acute renal failure)
- BUN (blood urea nitrogen)
- cath (catheter, catheterization)
- CKD (chronic kidney disease)
- ESRD (end-stage renal disease)
- ESWL (extracorporeal shock wave lithotripsy)
- HD (hemodialysis)
- KUB xray (kidney, ureter, and bladder xray)
- OAB (overactive bladder)
- SG (specific gravity)
- UA (urinalysis)
- UTI (urinary tract infection)
- VCUG (voiding cystourethrogram)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Urinary System Anatomy

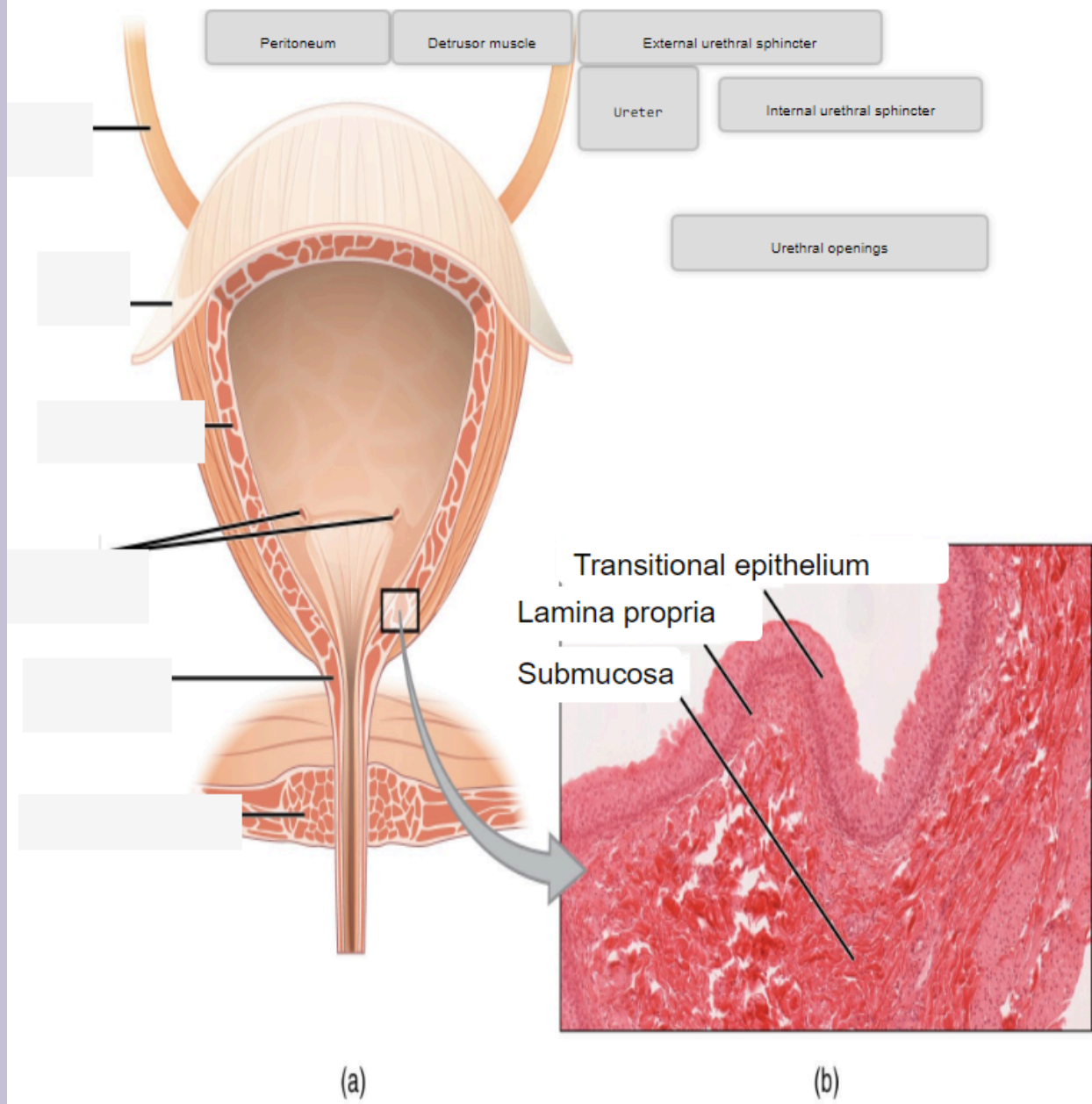
Label the following urinary system bladder anatomy:

Urinary System Bladder Anatomy (Text Version)

Label the diagram correctly with the following words:

- | | | |
|--------------------|--------------------------------|--------------------------------|
| 1. Peritoneum | 3. External urethral sphincter | 5. Internal urethral sphincter |
| 2. Detrusor muscle | 4. Ureter | 6. Ureteral opening |

Urinary System Bladder Anatomy



Urinary System Bladder Anatomy Diagram (Text Version)

This figure shows the cross section of the bladder, and the major parts are identified from top to bottom. The tube leading to the bladder is known as the _____[Blank 1]. Surrounding the bladder is a membranous cover called the _____[Blank 2]. The walls of the bladder are formed by _____[Blank 3], which allows the bladder to contract to excrete urine or relax to hold urine. The right panel shows a micrograph of the bladder. The _____[Blank 4] are found inside the bladder wall allowing for the ureters to enter and deposit urine formed from the kidneys. In the lower portion of the bladder is two sphincter muscles the internal one is the _____[Blank 5] and the _____[Blank 6]. These sphincter muscles open and close controlling the flow of urine out of the bladder and into the urethra to be carried to the outside of the body.

Check your answers: ¹

Activity source: Urinary System Bladder Anatomy by Kimberlee Carter, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Urinary System Operative Report (Text Version)

Fill in the consultation report with correct words listed below:

- Ureteral
- bladder
- recovery
- draped
- prepped
- fragmented
- lumen
- proximal

URINARY SYSTEM – OPERATIVE REPORT

PATIENT NAME: Cindy WARD

AGE: 48

DOB: September 19

SEX: Female

DATE OF SURGERY: January 8

SURGEON: Steve Foster, MD, Urologist

ASSISTANT: Michelle Stevenson, MD

ANESTHESIOLOGIST: Ryan Haywood, MD

ANESTHESIA: General

PREOPERATIVE DIAGNOSIS: Left proximal ureteral stones.

POSTOPERATIVE DIAGNOSIS: Left proximal ureteral calculi.

INDICATIONS: The patient is a 48-year-old female with a history of kidney stone disease, who has severe left flank pain and was found to have an obstructing large left proximal _____[Blank 1] stone.

OPERATIVE PROCEDURE: After induction of general anesthesia, the patient was placed in the lithotomy position. Patient was _____[Blank 2] and _____[Blank 3] in the usual sterile fashion. A #19-French cystoscope was inserted under camera vision. The urethra was unremarkable. The scope was passed into the bladder. The _____[Blank 4] mucosa was normal throughout. Under fluoroscopic control, a guidewire was placed up the left ureter and bypassed the stone. This was difficult at first, but the guidewire was eventually

manipulated around the stone into the _____[Blank 5] collecting system. A rigid ureteroscope was then negotiated up the left ureter alongside the guidewire up to the stone, which was at the junction.

The stone was quite large and occupied the entire _____[Blank 6] of the ureter. Lithotripsy was then performed under camera vision. Using the Holmium laser, the stone was _____[Blank 7] into multiple fragments, all of which were then individually basketed. Some of the stones were sent for analysis. Further ureteroscopy up to the kidney failed to reveal any significant sized fragments. Therefore, the ureteroscope was removed.

The procedure was tolerated by the patient without complications. The patient was taken to the _____[Blank 8] room in stable condition.

Steve Foster, MD, Urologist

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers:²

Activity source: Urinary System – Operative Report by Heather Scudder, licensed under CC BY 4.0./Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Urinary System Consultation Report (Text Version)

Fill in the consultation report with correct words listed below:

- Urine
- shortness
- pain
- leukorrhea
- dysuria
- foul
- urinalysis
- nausea
- UTIs

URINARY SYSTEM – CONSULTATION REPORT

PATIENT NAME: Renee WOODS

AGE: 32

SEX: Female

DOB: June 17

DATE OF CONSULTATION: January 8

CONSULTING PHYSICIAN: Steve Foster, MD, Urology

REASON FOR CONSULTATION: Urinary Tract Infection.

HISTORY: The patient is a 32-year-old female who is complaining of pain on urinating. Patient states it began approximately 3 days ago. The patient describes symptoms of _____[Blank 1] and increased frequency to the washroom. Patient states they usually go to the washroom to urinate 4-5 times a day, but starting 3 days ago, she started going 10-12 times per day. Sometimes no _____[Blank 2] comes out. The urine has a _____[Blank 3] odor and is cloudy. States there has been lower abdomen _____[Blank 4] since yesterday, and says it is worse when she tries to go with no result. Patient has had the same sexual partner for 10 years. She has a history of _____[Blank 5] and feels this is the same.

PHYSICAL EXAMINATION: GENERAL: No weakness, or tiredness. VITALS: Blood pressure 120/80, heart rate 70 and respirations 16. Patient weighs 150 pounds. LUNGS: No cough or _____[Blank 6] of breath. GASTRO: Denies _____[Blank 7], vomiting or change in bowel habits. URINARY/REPRODUCTIVE: Denies hematuria, or any _____[Blank 8].

ASSESSMENT: Did a urinalysis on patient. _____[Blank 9] revealed leukocytes 3+.

PLAN

1. Treat with Ampicillin 400 mg q.i.d.
2. Return to office if no improvement within 48 hours.

Steve Foster, MD, Urology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

Activity source: Urinary System Consultation Report by Heather Scudder and Sheila Bellefeuille, licensed under CC BY 4.0./Text version added.

Test Your Knowledge

Urinary System Glossary Reinforcement Activity (Text Version)

1. The removal of an amino group from molecule is called the _____[Blank 1].
 - a. Voiding
 - b. Deamination
 - c. Calyces

2. _____[Blank 2] is a measure of how acidic or alkaline a substance is, as determined by the number of free hydrogen ions in the substance.
 - a. pH
 - b. Apical
 - c. Osmosis

3. _____[Blank 3] relates to the equilibrium of liquids and the pressure exerted by liquid at rest.
 - a. Solutes
 - b. Hydrostatic
 - c. Mitochondria

4. The outermost layer of the wall of a blood vessel is called the _____[Blank 4].
 - a. Hydrostatic
 - b. Pseudostratified
 - c. Adventitial

5. Any of a group of compounds with varying hormone-like effects is referred to as _____[Blank 5].
 - a. Solutes
 - b. Excretion
 - c. Prostaglandins

Check your answers: ⁴

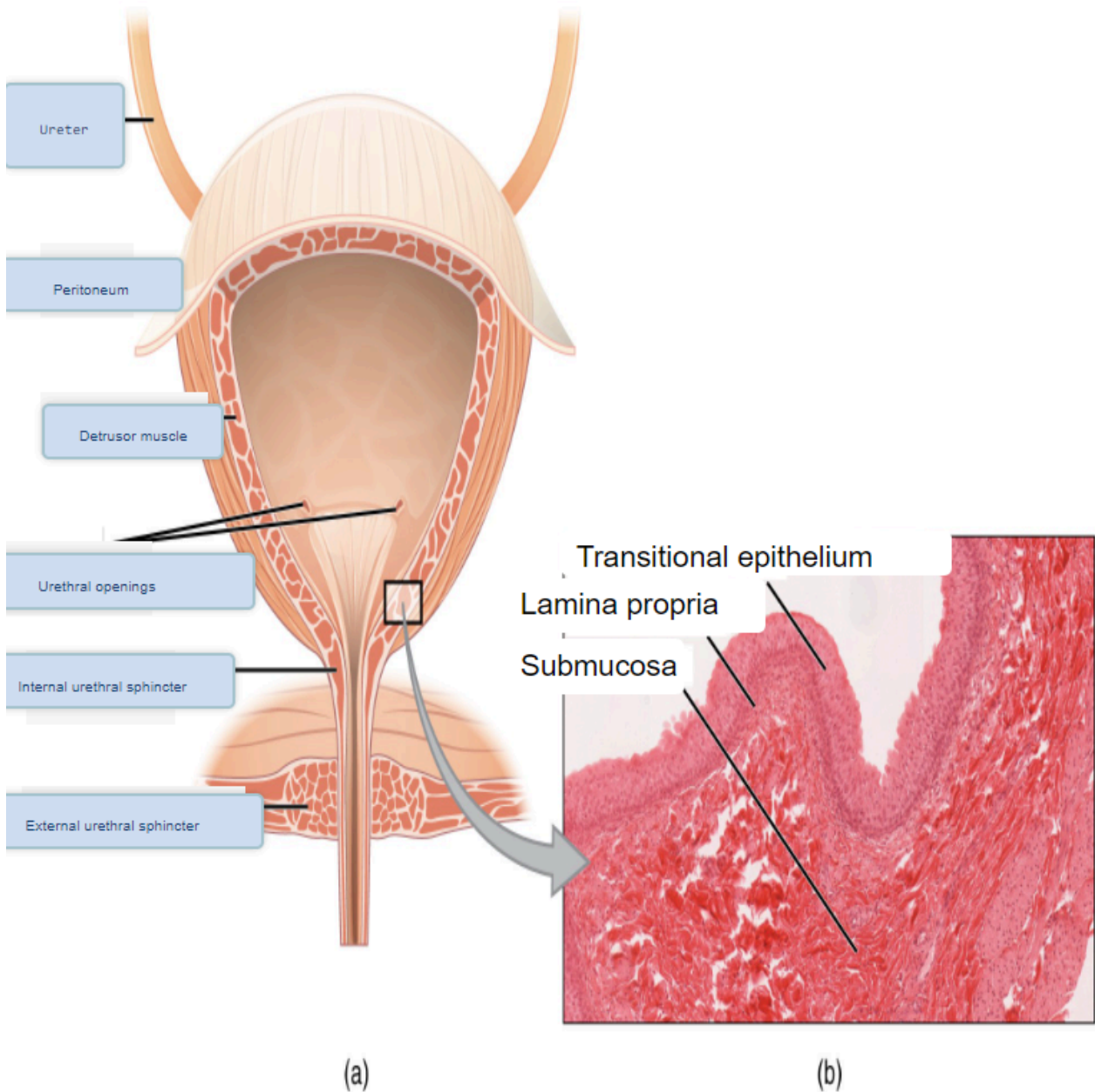
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Notes

Urinary System Bladder Anatomy



1.

Check your Answer: Urinary System Bladder Anatomy Diagram (Text Version) This figure shows the cross section of the bladder, and the major parts are identified from top to bottom. The tube leading to the bladder is known as the **ureter**. Surrounding the bladder is a membranous cover called the **peritoneum**. The walls of the bladder are formed by **detrusor muscle**, which allows the bladder to contract to excrete urine or relax to hold urine. The right panel shows a micrograph of the bladder. The **ureteral openings** are found inside the bladder wall allowing for the ureters to enter and deposit urine formed from the kidneys. In the lower portion of the bladder is two sphincter muscles the internal one is the **internal urethral sphincter** and the **external urethral sphincter**. These sphincter muscles open and close controlling the flow of urine out of the bladder and into the urethra to be carried to the outside of the body.

2. 1. Ureteral, 2. Prepped, 3. Draped, 4. Bladder, 5. Proximal, 6. Lumen, 7. Fragmented, 8. Recovery.
3. 1. Dysuria, 2. Urine, 3. Foul, 4. Pain, 5. UTIs, 6. Shortness, 7. Nausea, 8. Leukorrhea, 9. Urinalysis
4. 1. Deamination, 2.pH, 3. Hydrostatic, 4. Adventitial, 5. Prostaglandins

CHAPTER 6: MALE REPRODUCTIVE SYSTEM

Male Reproductive System

If you would like to review the textbook chapter content, please visit **Chapter 6: Male Reproductive System** [New Tab].

Learning Objectives

- Identify the anatomy and describe the main functions of the male reproductive system
- Analyze, translate, and define medical terms and common abbreviations of the male reproductive system
- Practice the spelling and pronunciation of male reproductive system medical terminology
- Identify the medical specialties associated with the male reproductive system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the male reproductive system:

Prefixes

- a- (absence of, without)
- an- (absence of, without)
- crypt- (hidden)
- dys- (painful, difficult)
- en- (in)
- epi- (above)
- hyper- (above, excessive)
- hypo- (below)

- par- (near)
- trans- (through, across, beyond)

Combining Forms

- andr/o (male)
- balan/o (glans penis)
- epididym/o (epididymis)
- gonad/o (gonad)
- orch/o (testis, testicle)
- orchi/o (testis, testicle)
- orchid/o (testis, testicle)
- pen/o (penis)
- pen/i (penis)
- phall/o (penis)
- preputi/o (prepuce, foreskin)
- posth/o (prepuce, foreskin)
- prostat/o (prostate gland)
- scrot/o (scrotum)
- semin/i (semen)
- sperm/o (sperm, spermatozoon)
- spermat/o (sperm, spermatozoon)
- test/o (testis, testicle)
- testicular/o (testis, testicle)
- vas/o (vas deferens, vessel, duct)
- vesicul/o (seminal vesicle)
- urethr/o (urethra)

Suffixes

- -al (pertaining to)
- -algia (pain)
- -ar (pertaining to)
- -atic (pertaining to)
- -cision (processing of cutting)
- -ectomy (excision or surgical removal)
- -ferous (pertaining to)
- -genesis ((beginning, development, or production))
- -gram (record)
- -graphy (process of recording)
- -ia (diseased state, abnormal state, condition of, condition)

- -ic (pertaining to)
- -ile (pertaining to)
- -ism (state of, condition)
- -itis (inflammation)
- -logy (study of)
- -lysis (loosening, dissolution, separating)
- -oma (tumor, mass)
- -ous (pertaining to)
- -pathy (disease)
- -pexy (surgical fixation, suspension)
- -plasia (development, growth)
- -plasty (surgical repair)
- -rrhea (flow, discharge)
- -sis (condition)
- -stomy (creation of new opening, process of new opening)
- -tion (process of)
- -tomy (cut into, incision)

Male Reproductive System Words

Pronouncing and Defining Male Reproductive System Medical Terms

Male Reproductive System terms not easily broken down into word parts (Text version)

1. **ablation**

- a-BLĀ-shŏn (Original Term)
- destruction of abnormal or excessive tissue by eroding, vaporizing or melting

2. **acquired immunodeficiency syndrome (AIDS)**

- ǎ-KWĪRD im-yū-nō-dě-FISH-ěn-sē SĪN-drōm
- advanced, chronic immune system suppression caused by human immunodeficiency virus (HIV) infection.

3. **artificial insemination**

- art-ī-FISH-āl in-sem-ī-NĀ-shōn
- the medical procedure of injecting concentrated sperm into the vagina or uterus.

4. **azoospermia**

- ā-zō-ō-SPĚR-mē-ǎ
- absence of viable sperm in the semen.

5. **chlamydia**

- klá-MID-ē-ǎ
- sexually transmitted disease caused by a very small parasitic bacterium (also known as the silent STD).

6. **circumcision**

- sīr-kūm-SIZH-ōn (Original Term)
- surgical removal of the prepuce (foreskin)

7. **coitus**

- KŌ-ī-tūs (Original Term)
- sexual intercourse

8. **condom**

- KON-dōm (Original Term)
- sheath (cover) for penis, worn during coitus to prevent conception and spread of sexually transmitted infection

9. **ejaculation**

- i-jak-yŭ-LĀ-shōn
- the action of ejecting semen from the body.

10. **enucleation**

- ē-nū-klē-Ā-shŭn (Original Term)
- excision of a whole organ or mass without cutting into it

11. **erectile dysfunction (ED)**

- ě-RĚK-tīl dis-FŪNGK-shōn
- the inability of a male to attain or maintain an erection sufficient to perform sexual intercourse

12. **genital herpes**

- JEN-ĭt-āl HĚRP-ēz
 - a sexually transmitted disease characterized by blisters in the genital area, caused by the herpes simplex virus type 2.
13. **gonorrhea**
- gon-ō-RĚ-ā
 - a sexually transmitted disease involving inflammatory discharge from the urethra or vagina.
14. **human immunodeficiency virus (HIV)**
- hu-man im-yŭ-nō-dě-FISH-ěn-sē VĪ-rŭs
 - a retrovirus that attacks the T-helper cells of the immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome)
15. **human papillomavirus (HPV)**
- hu-man PAP-ĭ-LŌ-mā-VĪ-rŭs
 - a sexually transmitted disease with over 40 subtypes that cause diseases in humans ranging from common warts to cervical cancer.
16. **hydrocele**
- HĪ-drŏ-sĕl (Original Term)
 - fluid-filled sac around the testicle
17. **hydrocelectomy**
- hĭ-drŏ-sĕ-LĚK-tŏ-mĕ (Original Term)
 - surgical removal of a fluid-filled sac around the testicle causing scrotal swelling (hydrocele)
18. **infertility**
- in-fĕr-TIL-ĭt-ĕ (Original Term)
 - inability to achieve pregnancy
19. **metastasis**
- mĕ-TAS-tă-sĭs
 - cancer spreading from one part of the body into another.
20. **morcellation**
- mor-sĕ-LĀ-shŏn
 - cutting or grinding solid tissue into smaller pieces for removal
21. **MRI ultrasound fusion biopsy**
- FŪ-zhŏn BĪ-op-sĕ
 - combination of magnetic resonance imaging with transrectal ultrasound (TRUS) to obtain a tissue from a prostate lesion. The combined MRI-TRUS image is used to direct the biopsy needle into the area of the prostate that looked suspicious on MRI.

22. **orgasm**

- OR-gazm
- a climax of sexual stimulation

23. **phimosis**

- fī-MŌ-sīs
- a tightness of the prepuce (foreskin of the penis) that prevents its retraction over the glans penis. It may be congenital or the result of balanitis. Circumcision is the usual treatment.

24. **priapism**

- PRĪ-ǎ-pizm
- persistent, abnormal erection of the penis accompanied by pain and tenderness

25. **prostate cancer**

- PROS-tāt KAN-sēr
- cancer of the prostate gland

26. **puberty**

- PŪ-běrt-ē
- the period during which adolescents develop secondary sex characteristics and become capable of reproduction.

27. **robotic surgery**

- rō-BŎ- tĭk SŪRJ-ě-rē
- use of small surgical instruments attached to a computer and operated by the surgeon from a console several feet from the operating table

28. **sexually transmitted disease (STD)**

- SEKS-ŭ-ǎ-lē trǎns-MĪT-ed diz-ĒZ
- infection spread through sexual contact; also known as sexually transmitted infection (STI)

29. **spermatocele**

- spěr-MĀT-ō-sēl
- distention of the epididymis containing an abnormal cyst-like collection of fluid and sperm cells

30. **sterility**

- stě-RIL-īt-ē (Original Term)
- a condition of being unable to conceive or reproduce the species

31. **sterilization**

- ster-ĭ-lĭ-ZĀ-shŏn
- procedure that prevents pregnancy, either a female's ability to conceive or a male's ability to induce conception

32. **syphilis**

- SIF-ĭ-līs
- a chronic bacterial disease spread primarily through sexual intercourse, but also congenitally by infection of a developing fetus. Rapidly spreads through the body and if left untreated becomes systemic.

33. **testicular cancer**

- tēs-TĪK-ū-lār KAN-sēr
- cancer of the testicle

34. **testicular torsion**

- tēs-TĪK-ū-lār TOR-shŏn
- twisting of the spermatic cord causing decreased blood flow to the testis. Considered a surgical emergency and accompanied by sudden onset of severe scrotal pain.

35. **transurethral**

- trans-ū-RĒ-thrāl
- pertaining to through the urethra

36. **transurethral incision of the prostate gland (TUIP)**

- surgical procedure that widens the urethra by making a few small incisions in the bladder neck and the prostate gland.

37. **transurethral resection of the prostate gland (TURP)**

- surgical removal of pieces of the prostate gland tissue by using an instrument inserted through the urethra.

38. **transurethral microwave thermotherapy (TUMT)**

- treatment that eliminates excess tissue present in benign prostatic hyperplasia by using heat generated by microwave.

39. **trichomoniasis**

- trĭk-ō-mō-NĪ-ă-sĭs
- sexually transmitted disease caused by the one-cell organism *Trichomonas*. Chiefly affects the urinary tract, vagina, or digestive system.

40. **varicocele**

- VAR-ĭō-sēl (Original Term)
- enlarged veins of the spermatic cord, which may cause scrotal swelling

Activity Source: Male Reproductive System terms not easily broken down into word parts from *Medical Terminology*. by Grimm et al., licensed under CC BY 4.0. / Some H5P audio re-recorded by Tania Deane and David McCuaig and text version added.

Pronouncing and Defining Commonly Abbreviated Male Reproductive System Terms

Practice pronouncing and defining these commonly abbreviated male reproductive system terms:

Male Reproductive System Abbreviations

- AIDS (acquired immunodeficiency syndrome)
- BPH (benign prostatic hyperplasia, benign prostatic hypertrophy)
- Bx (biopsy)
- DRE (digital rectal examination)
- ED (erectile dysfunction)
- GU (genitourinary)
- HIV (human immunodeficiency virus)
- HoLEP (holmium laser enucleation of the prostate gland)
- HPV (human papillomavirus)
- HSV-2 (herpes simplex virus 2)
- LUTS (lower urinary tract symptoms)
- PSA (prostate-specific antigen)
- PVP (photoselective vapourization of the prostate gland)
- RP (radical prostatectomy)
- STD (sexually transmitted disease)
- STI (sexually transmitted infection)
- TRUS (transrectal ultrasound)
- TSE (testicular self-examination)
- TUIP (transurethral incision of the prostate gland)
- TUMT (transurethral microwave thermotherapy)
- TURP (transurethral resection of the prostate gland)
- VD (venereal disease)

Reproductive Sexually Transmitted Infections (STIs) Abbreviations

- AB (Antibiotic)
- CT (Chlamydia)
- GC (Gonorrhea)
- HPV (Human Papillomavirus)
- HSV (Herpes Simplex Virus)

- PID (Pelvic Inflammatory Disease)
- STD (Sexually Transmitted Diseases)
- STI (Sexually Transmitted Infections)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Male Reproductive System Anatomy

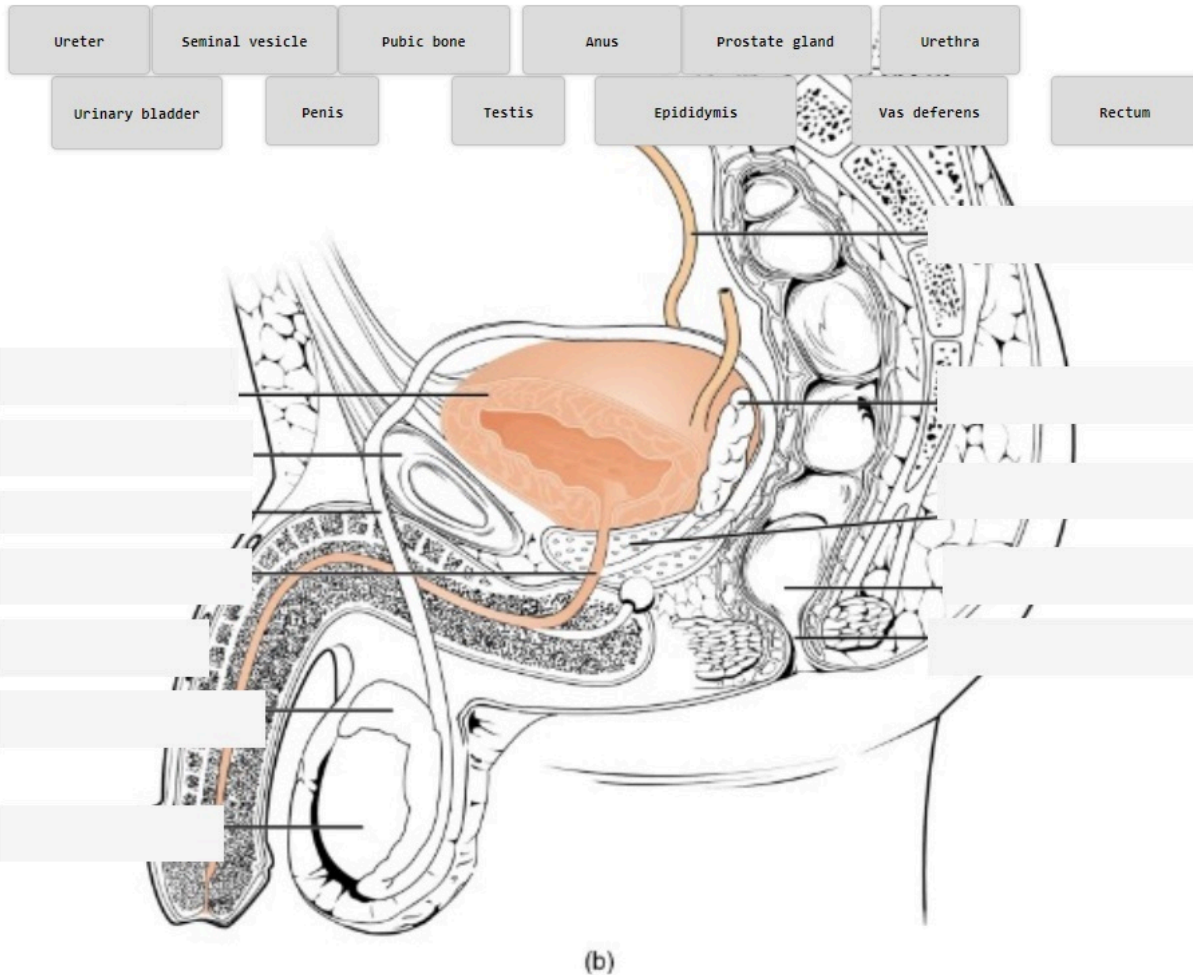
Label the following male reproductive system anatomy:

Anatomy Labeling Activity (Text Version)

Label the following diagram correctly with words:

- | | | |
|--------------------|--------------------|------------------|
| 1. Ureter | 5. Prostate Gland | 9. Testis |
| 2. Seminal Vesicle | 6. Urethra | 10. Epididymis |
| 3. Pubic Bone | 7. Urinary Bladder | 11. Vas Deferens |
| 4. Anus | 8. Penis | 12. Rectum |

Male Reproductive System Anatomy



Anatomy Labeling Activity Diagram (Text Version)

Detailed anatomical diagram of the male reproductive system from a lateral viewpoint. The diagram highlights the location of key components from top of the diagram is the _____[Blank 1]. Then from right to left is the _____[Blank 2] followed by the _____[Blank 3] which are a pair of glands that secrete fluid making up a substantial portion of seminal fluid. The _____[Blank 4] is one of the three bones making up the pelvis. The _____[Blank 5] is a carrying vessel that transports sperm from the testes to the urethra. Located at the base of the bladder is _____[Blank 6], this gland secretes nourishing fluid for sperm and becomes a component of semen. The _____[Blank 7] extends from the urinary bladder and carries the semen towards the penis. The _____[Blank 8], the external male sex organ used to inseminate a female during reproduction. The _____[Blank 9] is the straight portion of the lower large intestines, and the _____[Blank 10] expels fecal matter. Located under the penis is the _____[Blank 11] and extending from the testes is a cordlike structure known as the _____[Blank 12].

Check your answers: ¹

Activity source: Male Reproductive System Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Male Reproductive System Medical Report (Text Version)

Fill in the consultation report with correct words listed below:

- Urethral
- Prostatitis
- Complete
- by mouth
- circumcised

MALE REPRODUCTIVE SYSTEM – MEDICAL REPORT

PATIENT NAME: George SMITH

AGE: 57

SEX: Male

HISTORY (Hx): George Smith is a 57-year-old male who was referred to the urologist for a vasectomy.

FAMILY HISTORY: Has three living children. Occasional condom use for birth control.

PAST HISTORY

1. Herpes Simples Virus-2 (HSV-2) diagnosis (Dx) in 2002 and treated sexually transmitted infection (STI) in 2014.
2. Transurethral resection of the prostate (TURP) in 2019.
3. Current prostate specific antigen (PSA) is 15.6, with a previous result of 4.2.

PHYSICAL EXAMINATION/ASSESSMENT: Upon examination, normal male anatomy with _____[Blank 1] penis, normal foreskin and one testicle is descended. Leukorrhea is evident from the tip of the urethral os.

Complains of (c/o) urinary retention, nocturia and dysuria. He has had unprotected sexual intercourse four days ago. Digital rectal exam (DRE) indicated _____[Blank 2] with proctalgia.

DIAGNOSIS (Dx)

1. Urethral swab for gonorrhea/chlamydia (GC/CT).
2. Serology: PSA, _____[Blank 3] blood count (CBC).
3. Urine: Urinalysis, GC/CT, culture, and sensitivity (C&S).
4. Sonography for the undescended testicle.

MEDICATIONS (Rx)

1. Ceftriaxone 250 mg intramuscular immediately (IM STAT)
2. Azithromycin 1 g _____[Blank 4] immediately (po STAT)

PRELIMINARY CONCERNS

1. Rising PSA.
2. _____[Blank 5] discharge.

3. Undescended.

FOLLOW UP: Call office in 5 days for test results and follow up appointment in 2 weeks to discuss further booking of vasectomy and potential Bx (biopsy) of prostate.

Steve Fosters, MD, Urology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

Activity source: Male Reproduction – Medical Report by Connie Stevens and Heather Scudder, licensed under CC BY 4.0./Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Male Reproductive System Glossary Reinforcement Activity (Text Version)

1. The reproductive organs (testes in men and ovaries in women) that produce gametes and reproductive hormones is called the _____[Blank 1].
 - a. Penis
 - b. Semen
 - c. Gonads
2. The transformation of spermatids to spermatozoa during spermatogenesis is called _____[Blank 2].
 - a. Spermatogenesis
 - b. Prepuce
 - c. Ductus deferens
3. Glands that secrete a lubricating mucus that cleans and lubricates the urethra prior to and during ejaculation are called _____[Blank 3].
 - a. Testes
 - b. Bulbourethral glands

- c. Scrotum
4. A doughnut-shaped gland at the base of the bladder surrounding the urethra and contributing fluid to semen during ejaculation is called the _____[Blank 4].
- a. Seminal vesicle
 - b. Epididymis
 - c. Prostate gland
5. Opening in the abdominal wall that connects the testes to the abdominal cavity is called the _____[Blank 5].
- a. Inguinal canal
 - b. Sertoli cells
 - c. Gamete

Check your answers: ³

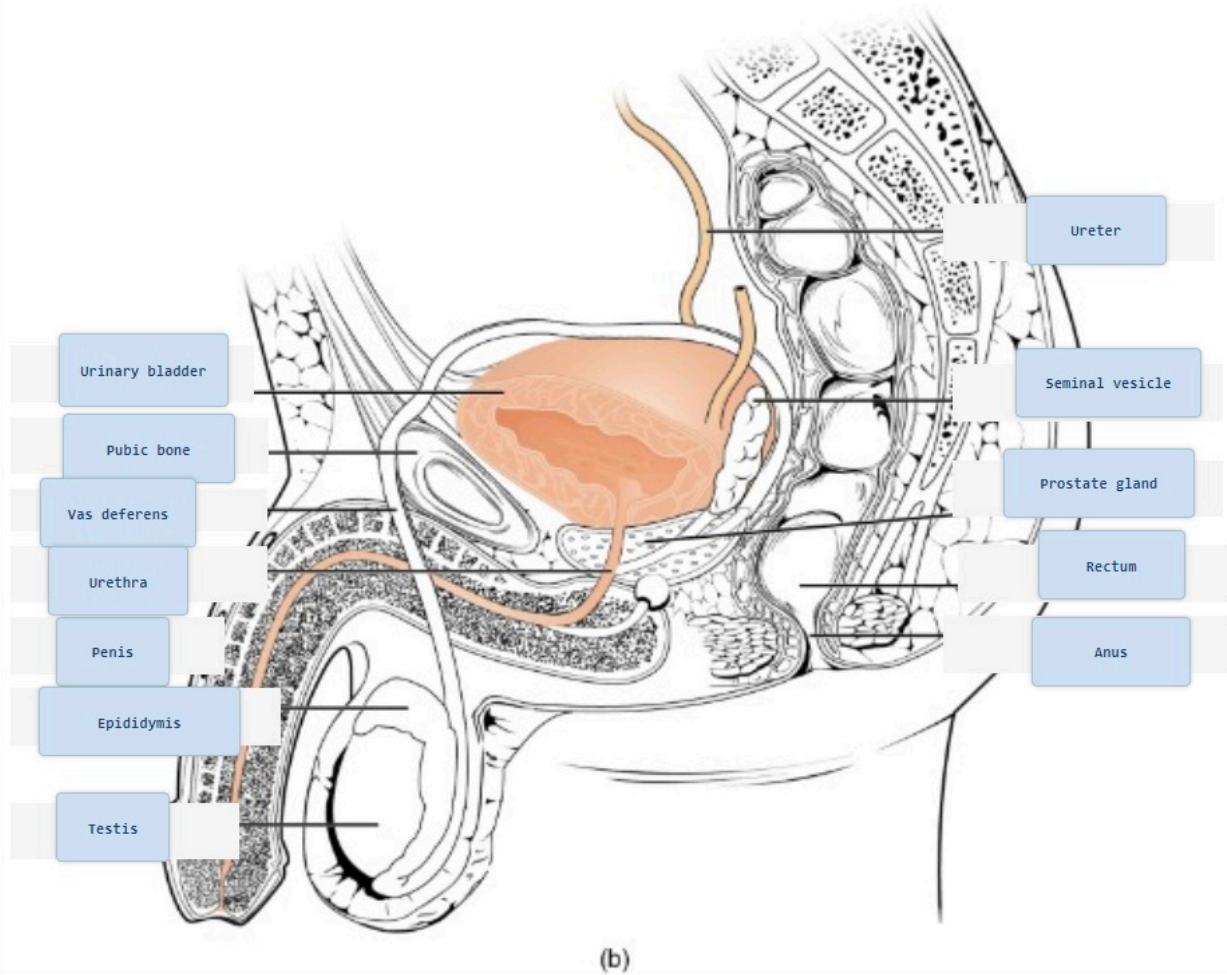
Activity source: Male Reproductive System Glossary Reinforcement Activity by Gisele Tuzon, licensed under CC BY 4.0.

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Notes

Male Reproductive System Anatomy



1.

Check your answer: Anatomy Labeling Activity Diagram (Text Version) Detailed anatomical diagram of the male reproductive system from a lateral viewpoint. The diagram highlights the location of key components from top of the diagram is the **ureter**. Then from right to left is the **urinary bladder** followed by the **seminal vesicles** which are a pair of glands that secrete fluid making up a substantial portion of seminal fluid. The **pubic bone** is one of the three bones making up the pelvis. The **vas deferens** is a carrying vessel that transports sperm from the testes to the urethra. Located at the base of the bladder is **prostate gland**, this gland secretes nourishing fluid for sperm and becomes a component of semen. The **urethra** extends from the urinary bladder and carries the semen towards the penis. The **penis**, the external male sex organ used to inseminate a female during reproduction. The **rectum** is the straight portion of the lower large intestines, and the **anus** expels fecal matter. Located under the penis is the **testes** and extending from the testes is a cordlike structure known as the **epididymis**.

2. 1. Circumcised, 2. Prostatitis, 3. Complete, 4. By mouth, 5. Urethral

3. 1. Gonads, 2. Spermatogenesis, 3. Bulbourethral glands, 4. Prostate gland, 5. Inguinal Canal

CHAPTER 7: FEMALE REPRODUCTIVE SYSTEM

Female Reproductive System

If you would like to review the textbook chapter content, please visit **Chapter 7: Female Reproductive System** [\[New Tab\]](#).

Learning Objectives

- Identify the anatomy and describe the main functions of the female reproductive system
- Analyze, translate, and define medical terms and common abbreviations of the female reproductive system
- Practice the spelling and pronunciation of female reproductive system medical terminology
- Identify the medical specialties associated with the female reproductive system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the female reproductive system:

Prefixes

- a- (absence of, without)
- an- (absence of, without)
- dys- (painful, difficult, abnormal, labored)
- endo- (within)
- peri- (surrounding)

Combining Forms

- arche/o (first, beginning)
- cervic/o (cervix)
- colp/o (vagina)
- endometri/o (endometrium)
- episi/o (vulva)
- gyn/o (woman)
- gynec/o (woman)
- hymen/o (hymen)
- hyster/o (uterus)
- mamm/o (breast)
- mast/o (breast)
- men/o (menstruation)
- metr/i (uterus)
- metr/o (uterus)
- oophor/o (ovary)
- pelv/i (pelvis, pelvic bones, pelvic cavity)
- perine/o (perineum)
- salping/o (fallopian tube)
- trachel/o (cervix)
- vagin/o (vagina)
- vulv/o (vulva)

Suffixes

- -al (pertaining to)
- -atresia (occlusion, closure)
- -clesis (surgical closure)
- -ectomy (excision, surgical removal)
- -gram (the record, radiographic image)
- -graphy (process of recording, radiographic imaging)
- -itis (inflammation)
- -logist (specialist or physician who studies and treats)
- -logy (study of)
- -osis (abnormal condition)
- -pexy (surgical fixation, suspension)
- -plasty (surgical repair)
- -rrhaphy (suturing, repairing)
- -rrhea (flow, discharge)

- -salpinx (fallopian tube)
- -scope (instrument used for visual examination)
- -scopy (visually examining)
- -tomy (cut into, incision)

Female Reproductive System Words

Female Reproductive System Medical Terms (Text version)

Practice the following female reproductive system words by breaking into word parts and pronouncing.

1. **menarche**

- men/arche
- beginning of menstruation

2. **cervicitis**

- cervic/itis
- inflammation of the cervix

3. **endocervical**

- endo/cervic/al
- pertaining to within the cervix

4. **colpocleisis**

- colp/o/cleisis
- surgical closure of the vagina

5. **colpoperineorrhaphy**

- colp/o/perine/o/rrhaphy
- suturing of the vagina and the perineum

6. **colpoplasty**

- colp/o/plasty
- surgical repair of the vagina

7. **colporrhaphy**

- colp/o/rrhaphy

- suturing of (a tear in) the vagina

8. **colposcope**

- colp/o/scope
- instrument used to view the vagina and the cervix

9. **colposcopy**

- colp/o/scopy
- process of viewing the vagina

10. **endometriosis**

- endometri/osis
- abnormal condition of the endometrium

11. **endometritis**

- endometr/itis
- inflammation of the endometrium

12. **episiorrhaphy**

- episi/o/rrhaphy
- suturing of the vulva

13. **episioperineoplasty**

- episi/o/perine/o/plasty
- surgical repair of the vulva and the perineum

14. **gynopathic**

- gyn/o/pathic
- disease pertaining to the women

15. **gynecologist**

- gynec/o/logist
- specialist or physician who studies and treats disorders and diseases of women

16. **gynecology**

- gynec/o/logy
- study of women

17. **hymenectomy**

- hymen/ectomy
- excision of the hymen

18. **hymenotomy**

- hymen/o/tomy
- incision into the hymen

19. **hysterectomy**

- hyster/ectomy
- excision of the uterus

20. **hysteropexy**

- hyster/o/pexy
- surgical fixation of the uterus

21. **hysterosalpingo-oophorectomy**

- hyster/o/salping/o/-oophor/ectomy
- excision of the uterus, uterine tubes, and ovaries

22. **hysterosalpingogram (HSG)**

- hyster/o/salping/o/gram
- radiographic image of the uterus and uterine tubes

23. **hysteroscope**

- hyster/o/scope
- instrument used for visual examination of the uterus

24. **hysteroscopy**

- hyster/o/scopy
- visual examination of the uterus

25. **sonohysterography (SHG)**

- son/o/hyster/o/graphy (SHG)
- process of recording the uterus by use of sound

26. **mammoplasty**

- mamm/o/plasty
- surgical repair of the breast

27. **mammogram**

- mamm/o/gram
- radiographic image of the breast

28. **mammography**

- mamm/o/graphy
- radiographic imaging of the breast

29. **mastitis**

- mast/itis
- inflammation of the breast

30. **mastectomy**

- mast/ectomy
- surgical removal of the breast

31. **mastopexy**

- mast/o/pexy
- surgical fixation of the breast

32. **mastalgia**

- mast/algia
- pain in the breast

33. **dysmenorrhea**

- dys/men/o/rrhea
- painful menstrual flow

34. **amenorrhea**

- a/men/o/rrhea
- absence of menstrual flow

35. **menometrorrhagia**

- men/o/metr/o/rrhagia
- excessive bleeding from the uterus at menstruation

36. **menorrhagia**

- men/o/rrhagia
- excessive bleeding at menstruation

37. **metrorrhagia**

- metr/o/rrhagia
- excessive bleeding from the uterus

38. **oligomenorrhea**

- olig/o/men/o/rrhea
- scanty menstrual flow

39. **myometritis**

- my/o/metr/itis
- inflammation of the uterine muscle

40. **perimetritis**

- peri/metr/itis
 - inflammation surrounding the uterus
41. **oophoritis**
- oophor/itis
 - inflammation of the ovary
42. **oophorectomy**
- oophor/ectomy
 - excision of the ovary
43. **pelviscopic**
- pelv/i/scop/ic
 - pertaining to visual examination of the pelvic cavity
44. **pelviscopy**
- pelv/i/scopy
 - visual examination of the pelvic cavity
45. **perineorrhaphy**
- perine/o/rrhaphy
 - suturing of (a tear in) the perineum
46. **salpingitis**
- salping/itis
 - inflammation of a fallopian/uterine tube
47. **salpingectomy**
- salping/ectomy
 - excision of the uterine/fallopian tube
48. **salpingo-oophorectomy**
- salping/o/-oophor/ectomy
 - excision of the uterine tube and ovary
49. **salpingostomy**
- salping/o/stomy
 - creation of an artificial opening in the uterine tube
50. **trachelectomy**
- trachel/ectomy
 - excision of the cervix
51. **trachelorrhaphy**

- trachel/o/rrhaphy
- suturing of the cervix

52. **vaginitis**

- vagin/itis
- inflammation of the vagina

53. **vaginosis**

- vagin/osis
- abnormal condition of the vagina

54. **vulvovaginitis**

- vulv/o/vagin/itis
- inflammation of the vulva and vagina

55. **vaginal**

- vagin/al
- pertaining to the vagina

56. **vesicovaginal**

- vesic/o/vagin/al
- pertaining to the bladder and the vagina

57. **vulvovaginal**

- vulv/o/vagin/al
- pertaining to the vulva and vagina

58. **vulvectomy**

- vulv/ectomy
- excision of the vulva

59. **hematosalpinx**

- hemat/o/salpinx
- blood in the uterine/fallopian tube

60. **hydrosalpinx**

- hydro/salpinx
- water in the uterine/fallopian tube

61. **pyosalpinx**

- py/o/salpinx
- pus in the uterine/fallopian tube

62. **leukorrhea**

- leuk/o/rrhea
- white discharge

63. **menopause**

- men/o/pause
- cessation on menstruation

64. **menses**

- men/ses
- the monthly bleeding from the uterus

65. **perimenopause**

- peri/men/o/pause
- period of time before and after menopause

Activity Source: Female Reproductive System Medical Terms by Kimberlee Carter, licensed under CC BY 4.0.

Pronouncing and Defining Female Reproductive System Medical Terms

Female Reproductive System (Text version)

Practice these female reproductive medical terms that are not easily broken into word parts.

1. **adenomyosis**

- (ad-ě-nō-mī-Ō-sis)
- growth of endometrium into the other muscular portion of the uterus

2. **anovulation**

- (an-ov-yŭ-LĀ-shŏn)
- absence of ovulation

3. **Bartholin's glands**

- (BAR-tō-lĭns glăns)
- Also known as greater vestibular glands they are responsible to secrete mucus to keep the vestibular area moist

4. **breast cancer**

- brest KAN-sĕr

- malignant tumor of the breast

5. **cervical cancer**

- SĚR-vi-kāl KAN-sěr
- malignant tumor of the cervix, which progresses from cervical dysplasia to carcinoma. Its cause is linked to human papillomavirus (HPV) infection.

6. **contraception**

- kon-trä-SEP-shõn
- intentional prevention of conception (pregnancy)

7. **dyspareunia**

- dis-pä-ROO-nē-ã
- difficult or painful intercourse

8. **endometrial cancer**

- en-dō-MĚ-trē-ãl KAN-sěr
- malignant tumor of the endometrium (also called uterine cancer)

9. **fibrocystic changes of the breast (FCC)**

- fī-brō-SĪS-tik brest
- fibrosis, benign cysts, and pain or tenderness in one or both breasts (also called fibrocystic breasts)

10. **fistula**

- FIS-chũ-lã
- abnormal passageway between two organs or an internal organ and the body surface

11. **hormonal replacement therapy (HRT)**

- replacement of hormones, estrogen, and progesterone, typically to treat symptoms associated with menopause

12. **menopause**

- MEN-õ-poz
- cessation of menstruation

13. **oligoovulation**

- ol-i-gõ-ov-yũ-LĀ-shõn
- infrequent ovulation

14. **ovarian cancer**

- õ-VAR-ē-ãn KAN-sěr
- malignant tumor of the ovary

15. **ovulation**

- ov-yŭ-LĀ-shŏn
- release of ovum from a mature Graafian follicle

16. **Papanicolaou smear**

- pĀp-ă-NĒ-kă-low smĕr
- PAP test – A smear method for examining cells, that is used to detect cancers of the cervix

17. **pelvic inflammatory disease (PID)**

- inflammation of some or all of the female pelvic organs

18. **polycystic ovary syndrome (PCOS)**

- pŏl-ē-SĪS-tĭk Ō-vă-rĕ SĪN-drŏm
- condition typically characterized by hormonal imbalances, ovulatory dysfunction, and multiple ovarian cysts.

19. **premenstrual syndrome**

- prĕ-MĒN-stroo-ăl SĪN-drŏm
- syndrome involving physical and emotional symptoms occurring up to 10 days before menstruation. Symptoms include nervous tension, irritability, mastalgia, edema, and headache.

20. **prolapse**

- PRŌ-laps
- displacement of an organ or anatomic structure from its normal position

21. **speculum**

- SPEK-yŭ-lŭm
- instrument for opening a body cavity to allow visual inspection

22. **toxic shock syndrome**

- severe illness characterized by high fever, rash, vomiting, diarrhea, and myalgia followed by hypotension and, in severe cases, shock and death. Typically occurs in women using tampons and caused by Staphylococcus aureus and Streptococcus pyogenes

23. **tubal ligation**

- TOO-băl lĭ-GĀ-shŏn
- surgical closure of the fallopian tubes for sterilization

24. **uterine fibroid**

- ŪT-ĕ-rĭn FIB-royd
- benign tumor of the uterine muscle

25. **uterine prolapse**

- ŪT-ĕ-rĭn PRŌ-laps

- downward displacement of the uterus into the vagina

26. **vaginal fistula**

- VAJ-în-ăl FIS-chŭ-lă
- abnormal opening between the vagina and another organ, such as the urinary bladder, colon, or rectum

Activity Source: Female Reproductive System terms not built from word parts from *Medical Terminology* by Grimm et al., licensed under CC BY 4.0./Some H5P audio re-recorded by Tania Deane and David McCuaig and text version added.

Pronouncing and Defining Commonly Abbreviated Female Reproductive System Terms

Practice pronouncing and defining these commonly abbreviated female reproductive system terms:

Female Reproductive System Term Abbreviations

- BC (birth control)
- Cx (cervix)
- D&C (dilation and curettage)
- FCC (fibrocystic breast changes)
- GYN (gynecology)
- HPV (human papillomavirus)
- HRT (hormone replacement therapy)
- HSG (hysterosalpingogram)
- IUD (intrauterine device)
- LAVH (laparoscopically assisted vaginal hysterectomy)
- PCOS (polycystic ovarian syndrome)
- PID (pelvic inflammatory disease)
- PMS (premenstrual syndrome)
- SHG (sonohysterography)
- TAH/BSO (total abdominal hysterectomy/bilateral salpingo-oophorectomy)
- TLH (total laparoscopic hysterectomy)
- TSS (toxic shock syndrome)
- TVH (total vaginal hysterectomy)

- TVS (transvaginal sonography)
- UAE (uterine artery embolization)

Reproductive Sexually Transmitted Infections (STI) Abbreviations

- AB (Antibiotic)
- CT (Chlamydia)
- GC (Gonorrhea)
- HPV (Human Papillomavirus)
- HSV (Herpes Simplex Virus)
- PID (Pelvic Inflammatory Disease)
- STD (Sexually Transmitted Diseases)
- STI (Sexually Transmitted Infections)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

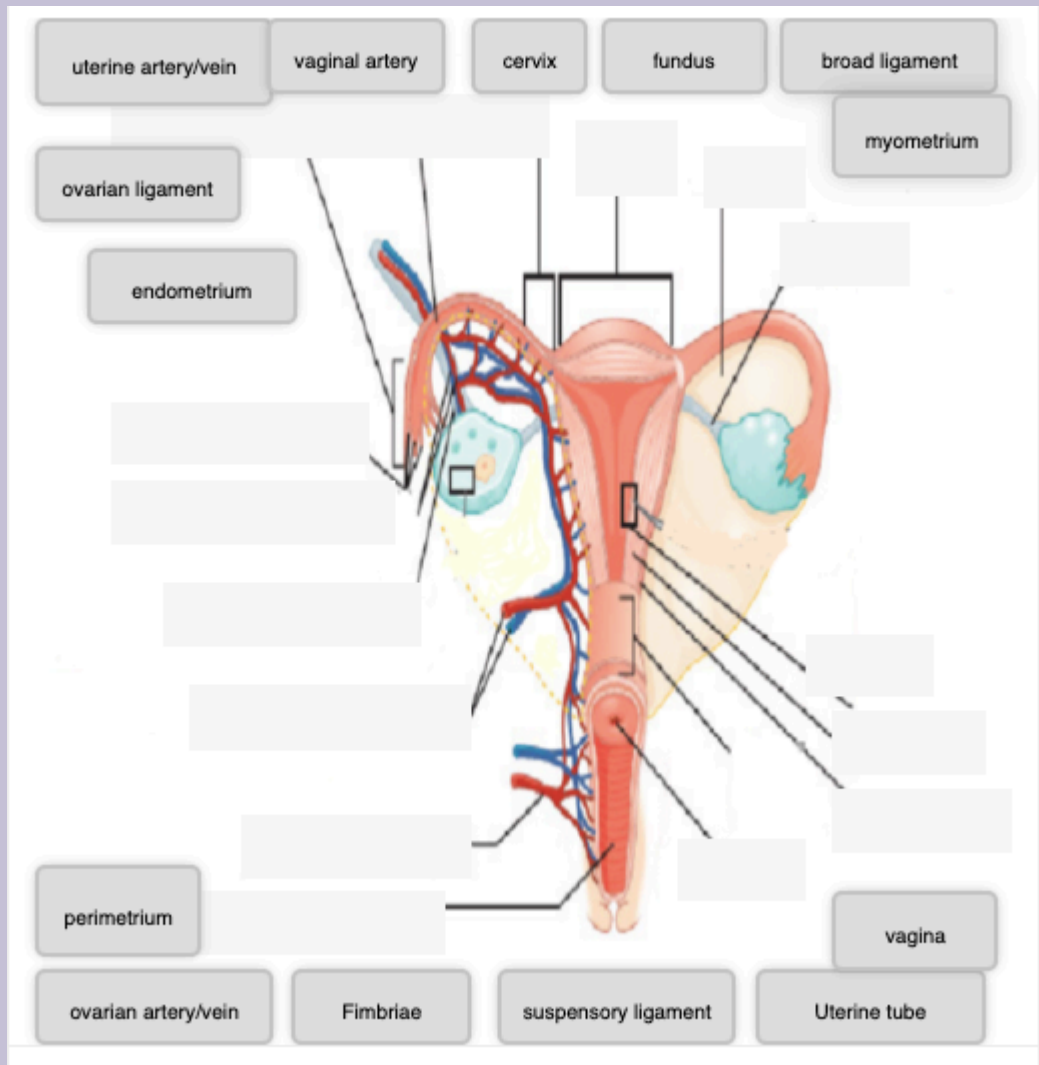
Female Reproductive System Structures

Label the following female reproductive system anatomy:

Anatomy Labeling Activity (Text Version)

Label the diagram correctly with the following words:

- | | | |
|------------------------|---------------------|-------------------------|
| 1. Broad Ligament | 6. Cervix | 11. Ovarian artery/vein |
| 2. Fundus | 7. Myometrium | 12. Fimbriae |
| 3. Uterine Tube | 8. Ovarian Ligament | 13. Suspensory Ligament |
| 4. Uterine artery/vein | 9. Endometrium | 14. Vagina |
| 5. Vaginal Artery | 10. Perimetrium | |



Anatomy Labeling Activity Diagram (Text Version)

Diagram of female reproductive system featuring anatomy organs and structures. The _____[Blank 1] also know as the fallopian tubes are positioned at the right top portion of the diagram. Extending from the uterine tube is finger-like projects known as _____[Blank 2]. The _____[Blank 3] is also known as the womb, is a hollow, muscular organ located in the pelvis between the bladder and rectum. The _____[Blank 4] supplies blood to the uterus. The _____[Blank 5] of uterus, also called the uterine fundus, refers to the dome-shaped, rounded superior part of the body of the uterus that lies above the opening. The _____[Blank 6] and the round ligaments of the uterus serve as secondary support for the uterus within the pelvis. The _____[Blank 7] is a fold of tissue arising from the peritoneum and extends out from the ovaries. The _____[Blank 8] connects the ovaries to the lateral surface of the uterus. The _____[Blank 9] supplies

blood to the ovaries. The three layers of the uterus from outside to inside are the _____[Blank 10], _____[Blank 11], _____[Blank 12]. The neck of the uterus is called the cervix. The _____[Blank 13] is a muscular canal connecting the cervix of the uterus and serves as the birth canal during childbirth. The _____[Blank 14] supplies the vagina with blood.

Check your answers:¹

Activity source: Female Reproductive System Anatomy by Kimberlee Carter, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Medical Terms in Context (Text Version)

Use the words below to fill in the medical report:

- Transvaginal
- Laparoscopy
- Dysmenorrhea
- Pain
- Endometrial
- Tissue
- Cysts
- Pelvic
- Endometriosis

FEMALE REPRODUCTIVE SYSTEM – MEDICAL REPORT

PATIENT NAME: Stacey ROBERTS

AGE: 28 Sex: Female

DOB: October 27

DATE OF ASSESSMENT: July 22

ADMITTING PHYSICIAN: Adam Vance, MD, Gynecology

DIAGNOSIS: Endometriosis

HISTORY: This 28-year-old white female came to me with symptoms of _____ [Blank 1]. She presented with _____[Blank 2], menorrhagia, and pain with intercourse.

PHYSICAL EXAMINATION: During a _____[Blank 3] exam, abnormalities were felt. A _____[Blank 4] ultrasound was performed, and _____[Blank 5] were identified.

TREATMENT: I have discussed the results of the ultrasound and have recommended a laparoscopy to provide more information on the location, extent, and size of the _____[Blank 6] implants. A _____[Blank 7] sample will be sent for further testing. If possible, the endometriosis implants will be removed.

PLAN: Ms. Roberts has agreed to the laparoscopy. I have prescribed Orilissa to help with the _____[Blank 8]. My office will set up an appointment for the _____[Blank 9].

Adam Vance, MD, Gynecology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

Activity source: Female Reproductive System – Medical Report by Heather Scudder, licensed under CC BY 4.0./Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Medical Terms in Context (Text Version)

Use the words below to fill in the medical report:

- Edema
- Blood Pressure
- Ovarian
- Menorrhagia
- Auscultation
- Murmur
- Spotting
- Chronic
- Oophoritis
- Urination
- Abdominal
- RLQ

FEMALE REPRODUCTIVE SYSTEM – MEDICAL REPORT

PATIENT NAME: Megan WESTOVER

AGE: 29

SEX: Female

DOB: November 22

DATE OF ASSESSMENT: June 4

ATTENDING PHYSICIAN: Adam Vance, MD, Gynecology

HISTORY: A 29-year-old woman complains of right _____[Blank 1] pain. She has fever with chills, nausea, and pain during _____[Blank 2] for 3 days. She is in the 4th day of her menstrual cycle and has _____[Blank 3]. She has had intermenstrual _____[Blank 4] for the last 3 menstrual cycles. She had a hysterectomy due to a breast cancer 9 years ago. She has no other history of _____[Blank 5] illness.

PHYSICAL AND EXAMINATION: VITAL SIGNS: Temperature 102.2, _____[Blank 6] 115/75, and pulse 92, regular. Respiratory rate 16. LUNGS: Normal breath sounds. HEART: No _____[Blank 7], regular rhythm. ABDOMEN: There is a tenderness to deep palpation in the _____[Blank 8]. Pain triggers when the patient bends forward. Normal to _____[Blank 9]. BACK: No flank tenderness. EXTREMITIES: Normal with no _____[Blank 10].

LABORATORY: No UTI, urinalysis done in the clinic negative.

ASSESSMENT: Rule out _____[Blank 11]. No evidence of UTI currently.

PLAN

1. CBC lab testing.
2. Pelvic ultrasound focused on _____ [Blank 12]structures, transvaginal ultrasound.
3. Begin treatment empirically with Ampicillin 500 mg daily.
4. Follow up with the patient after the blood and ultrasound results.

Adam Vance, MD, Gynecology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

Activity source: Female Reproductive System – Medical Report by Heather Scudder and Sheila Bellefeuille, licensed under CC BY 4.0./Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Medical Terms in Context (Text Version)

Using the words below fill in the consultation report:

- Cyanosis
- Mastectomy
- Chemotherapy
- Breast
- HEENT
- Murmurs
- Weight
- Distended
- Erythema
- Lesion

FEMALE REPRODUCTIVE SYSTEM – CONSULTATION REPORT

PATIENT NAME: Abigail LANGMAN

AGE: 51

SEX: Female

DOB: July 27

DATE OF CONSULTATION: October 8

CONSULTING PHYSICIAN: Adam Vance, MD, OB/GYN

REASON FOR CONSULTATION: Possible breast cancer.

HISTORY: Patient is a 51-year-old woman here for a check-up because of a suspicious lump that was found on her yearly mammogram. Patient is worried about possible _____[Blank 1] cancer.

PHYSICAL EXAMINATION: GENERAL: No acute distress. VITAL SIGNS: Temperature is 98.1°F. Pulse is 72, BP is 110/72 mm Hg. Respirations 16. _____[Blank 2] is 186 pounds, height is 5 feet, 8 inches. _____[Blank 3] : Eyes are equal and responsive. Ears are normal, no discharge. Nose is normal. Throat is normal and without _____[Blank 4]. LUNGS: Clear to auscultation. CARDIOVASCULAR: Regular rate and rhythm, no _____[Blank 5]. ABDOMEN: Palpation is soft, not _____[Blank 6], nontender. BREAST: RIGHT: Tender to the touch on right side and has a hard lump about the size of a golf ball near the axilla. LEFT: Normal to the touch, no discomfort. EXTREMITIES: Without edema, _____[Blank 7], or clubbing.

SOCIAL HISTORY: Mother had breast cancer at the age of 48 and had a _____[Blank 8] to remove the left breast. Patient has been scheduled for yearly mammograms since the age of 45 to check for possible signs of early breast cancer. Father has a history of stage 1 rectal cancer treated with 3 rounds of _____[Blank 9]. The patient does not smoke or use recreational drugs, she does like a glass of wine 3-4 nights a week.

Patient states she is quite worried since scheduling an appointment to follow up her mammogram results. Patient has experiencing anxiety which is affecting her eating and sleeping routine.

ASSESSMENT: Patient is a 51-year-old woman here for a check-up because a suspicious lump found on her yearly mammogram. Patient is otherwise healthy and is not currently on any medications.

PLAN

1. 1. Ultrasound of the right breast.
2. 2. Biopsy of the _____[Blank 10] for pathology. Avoid overexertion or lifting of arms above shoulder height after the biopsy
3. 3. Follow-up appointment in 2-3 weeks for results.

Adam Vance, MD, OB/GYN

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers:⁴

Activity source: Female Reproductive System – Medical Report by Heather Scudder and Sheila Bellefeuille, licensed under CC BY 4.0./Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Female Reproductive System Glossary Reinforcement Activity (Text Version)

1. The site of implantation for a fertilized egg or the layer that sheds during menstruation if no egg is fertilized is called _____. [Blank 1].
 - a. Endometrium
 - b. Oocyte
 - c. Puerperium
2. Hysterectomy is the _____. [Blank 2].
 - a. Surgical removal of the breast(s)
 - b. Surgical removal of the uterus
 - c. Surgical removal of the fallopian/uterine tubes
3. Pain periods is called _____. [Blank 3].
 - a. Dysmenorrhea
 - b. Amenorrhea
 - c. Oligomenorrhea
4. Painful Intercourse is called _____. [Blank 4].
 - a. Dysuria
 - b. Dyspareunia
 - c. Dysmenorrhea
5. The superior portion of the vagina is called _____. [Blank 5].
 - a. Axilla
 - b. Bartholin's glands
 - c. Fornix

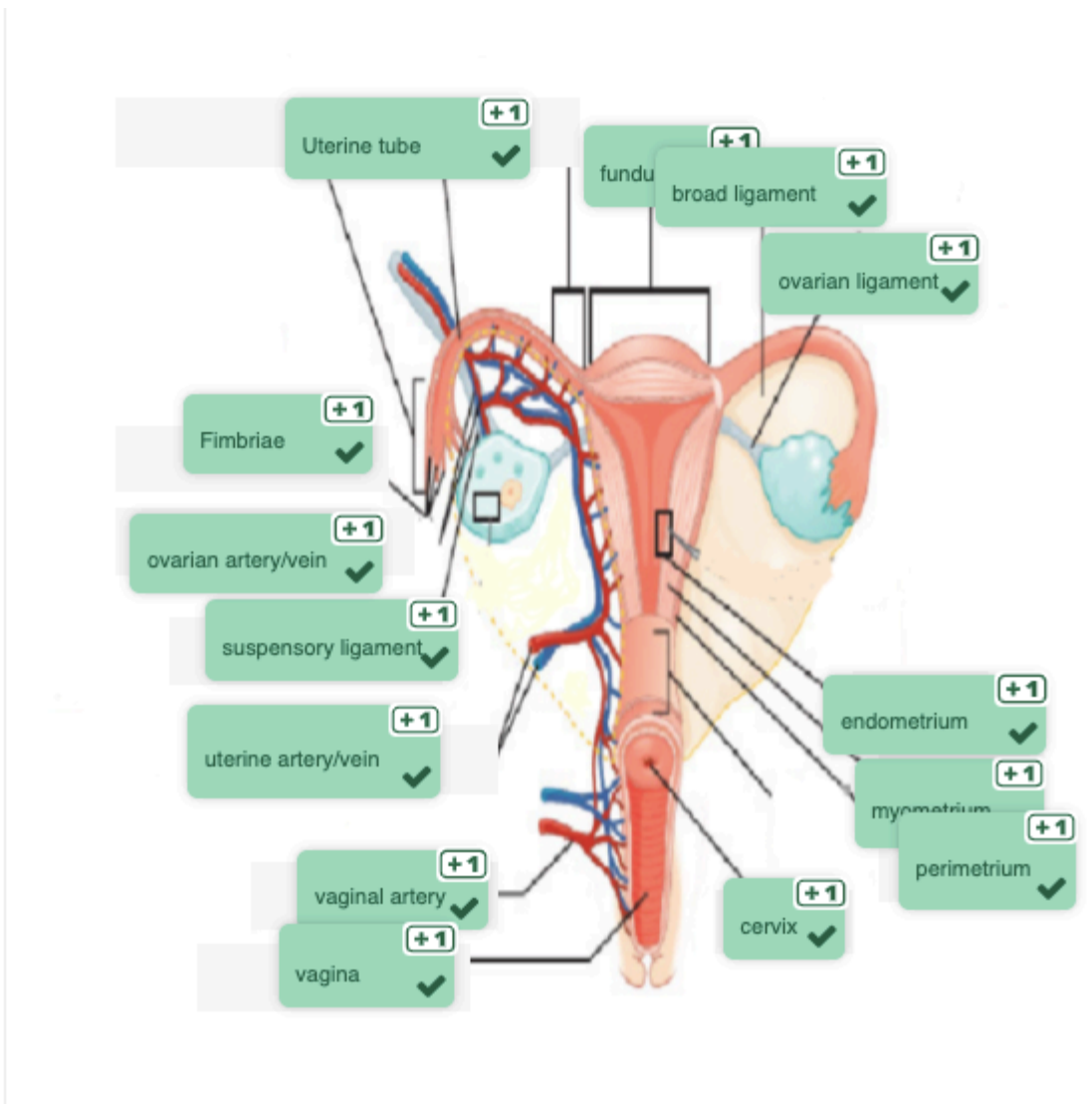
Check your answers: ⁵

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Notes



1.

Anatomy

Labeling Activity Diagram (Text Version)Diagram of female reproductive system featuring anatomy organs and structures. The **uterine tube** also known as the fallopian tubes are positioned at the right top portion of the diagram. Extending from the uterine tube is finger-like projects known as **fimbriae**. The **uterus** is also known as the womb, is a hollow, muscular organ located in the pelvis between the bladder and rectum. The **uterine artery/vein** supplies blood to the uterus. The **fundus** of uterus, also called the uterine fundus, refers to the dome-shaped, rounded superior part of the body of the uterus that lies above the opening. The **broad ligament** and the round ligaments of the uterus serve as secondary support for the uterus within the pelvis. The **suspensory ligament** is a fold of tissue arising from the peritoneum and extends out from the ovaries. The **ovarian ligament** connects the ovaries to the lateral surface of the uterus. The **ovarian artery/vein** supplies blood to the ovaries. The three layers of the uterus from outside to inside are the **endometrium**, **myometrium**, **perimetrium**. The neck of the uterus is called the cervix. The **vagina** is a

muscular canal connecting the cervix of the uterus and serves as the birth canal during childbirth. The **vaginal artery** supplies the vagina with blood.

2. 1. Endometriosis 2. Dysmenorrhea 3. Pelvic 4. Transvaginal 5. Cysts 6. Endometrial 7. Tissue 8. Pain 9. Laparoscopy
3. 1. Abdominal 2. Urination 3. Menorrhagia 4. Spotting 5. Chronic 6. Blood Pressure 7. Murmur 8. RLQ 9. Auscultation 10. Edema 11. Oophoritis 12. Ovarian
4. 1. Breast, 2. Weight, 3. HEENT 4. Erythema, 5. Murmurs, 6. Distended, 7. Cyanosis, 8. Mastectomy, 9. Chemotherapy, 10. Lesion
5. 1. Endometrium 2. Surgical removal of the uterus 3. Dysmenorrhea 4. Dyspareunia 5. Fornix

CHAPTER 8: OBSTETRICS

Obstetrics

If you would like to review the textbook chapter content, please visit [Chapter 8: Obstetrics \[New Tab\]](#).

Learning Objectives

- Identify the common processes in obstetrics and explore procedures, diagnostics tests and common complications related to obstetrics
- Describe the specialty of obstetrics and other medical specialties associated with obstetrics
- Analyze, translate, and define medical terms and common abbreviations of obstetrics
- Practice the spelling and pronunciation of obstetric terminology

Key Word Components

Identify meanings of key word components of obstetrics:

Prefixes

- ante- (before)
- dys- (painful, labored, difficult)
- endo- (within)
- in-, intra- (within, inside)
- micro- (small)
- multi- (many)
- neo- (new)
- nulli- (none)
- post- (after)

- pre- (before)
- prim/i- (first)
- retro- (backward, behind)

Combining Forms

- amni/o (amnion, amniotic fluid)
- cephal/o (head)
- cervic/o (cervix)
- chori/o, chorion/o (chorion)
- colp/o (vagina)
- culd/o (rectouterine pouch)
- embryo/o (embryo)
- episi/o (vulva)
- esophag/o (esophagus)
- fet/i (fetus, unborn offspring)
- fet/o (fetus, unborn offspring)
- glact/o (milk)
- gravid/o (pregnancy)
- gynec/o (woman)
- hyster/o (uterus)
- lact/o (milk)
- mamm/o (breast)
- mast/o (breast)
- men/o (menstruation)
- metr/o (uterus)
- metri/o (uterus)
- nat/i (birth)
- nat/o (birth)
- obstetr/o (midwife)
- olig/o (scanty, few)
- omphal/o (umbilicus, navel)
- oophor/o (ovary)
- ov/o (ovary)
- ovari/o (ovary)
- ovul/o (ovary)
- par/o (to bear, labor, childbirth, give birth to)
- part/o (to bear, labor, childbirth, give birth to)
- perine/o (perineum)
- pseud/o (false)
- prim/i (first)
- pseud/o (false)
- puerper/o (childbirth)

- pylor/o (pylorus, pyloric sphincter)
- salping/o (uterine tube)
- terat/o (malformations)
- uter/o (uterus)
- vagin/o (vagina)
- vulv/o (vulva)

Suffixes

- -a (no meaning, noun ending)
- -al (pertaining to)
- -amnios (amnion, amniotic fluid)
- -arche/o (beginning, first)
- -cyesis (pregnancy)
- -e (noun ending, no meaning)
- -gen (substance that produced, agent that produced)
- -genic (producing, originating, causing)
- -graphy (process of recording)
- -ic (pertaining to)
- -is (noun suffix, no meaning)
- -itis (inflammation)
- -logist (specialist who studies and treats, physician who studies and treats)
- -logy (study of)
- -oid (resembling)
- -oma (tumor)
- -parous (having given birth)
- -rrhea (discharge, flow)
- -rrhexis (rupture)
- -salpinx (tube or uterine tube)
- -stenosis (constriction, narrowing)
- -tocia (birth, labor)
- -tomy (incision, cut into)
- -um (noun ending, no meaning)
- -us (noun ending, no meaning)
- -version (turned, turning, *for example turning the fetus*)

Obstetrics Words

Pronouncing and Defining Obstetrics Medical Terms

Obstetrics Words Not Easily Broken into Word Parts (Text version)

1. **abortion (AB) (ă-BOR-shŏn)**
 - termination of the pregnancy before the fetus is viable
2. **abruptio placentae (ă-BRŪP-shē-ō plā-SENT-ā)**
 - pre-mature separation of the placenta from the uterine wall
3. **Apgar score (AP-gar skŏr)**
 - Evaluation of a newborn's physical condition within one to five minutes after birth, which was developed by and named for Virginia Apgar (making this an eponym).
4. **Breech (brĕch)**
 - The position of the fetus is feet first. Ideally, the position of the fetus should be head first.
5. **Cesarean section (CS, C-section) (si-ZAR-ē-ăn SEK-shŏn)**
 - Delivery of the fetus through an abdominal incision
6. **cephalic presentation (sĕ-FAL-ĭk prĕ-zen-TĀ-shŏn)**
 - birth position in which any part of the head emerges first
7. **Cephalic version (sĕ-FAL-ĭk VĚR-zhŏn)**
 - pertaining to turning the head; this procedure is done on the fetus when they are in the head-down position.
8. **cerclage (sĕr-KLĀZH)**
 - Suturing of the cervix to prevent dilation and premature delivery

9. **colostrum (kō-LOS-trūm)**
 - thin, milky fluid secreted by the breast during pregnancy and the first few days after delivery
10. **congenital anomaly (kōn-JĚN-ĭ-tāl ā-NOM-ā-lē)**
 - abnormality present at birth
11. **eclampsia (e-KLAMP-sē-ā)**
 - a serious condition in pregnancy with hypertension; patients are at risk of coma, convulsions and even death.
12. **Ectopic pregnancy (ek-TOP-ik PREG-nān-sē)**
 - Pregnancy occurring outside the uterus, commonly in the fallopian tube.
13. **Induction (in-DŮK-shōn)**
 - The process of bringing on or starting labour. This may be done with a membrane sweep or through the use of IV oxytocin
14. **in vitro fertilization (IVF) (in VĚ-trō fĕrt-il-ĭ-ZĀ-shōn)**
 - method of fertilizing human ova outside the body and placing the zygote in the uterus
15. **lactation (lak-TĀ-shōn)**
 - secretion of milk
16. **lochia (LŌ-kē-ā)**
 - vaginal discharge after birth
17. **meconium (mē-KŌ-nē-ŭm)**
 - first stool of the newborn
18. **midwife (MĪD-wĭf)**
 - individual who practices midwifery
19. **craniocerebral**
 - practice of assisting in childbirth
20. **Obstetrician (ob-stĕ-TRISH-ān)**
 - Physician who specializes in obstetrics
21. **Obstetrics (OB) (ōb-STE-triks)**
 - medical specialty dealing with pregnancy, childbirth, and puerperium
22. **parturition (pār-tū-RĪSH-ŭn)**

- act of giving birth
23. **placenta previa (plā-SENT-ā PRĒ-vē-ă)**
- abnormally low implantation of the placenta on the uterine wall, can result in hemorrhage and a c-section
24. **preeclampsia (prē-ĕ-KLAMP-sē-ă)**
- The abnormal condition in pregnancy where the patient experiences hypertension, edema and proteinuria is called, but with no convulsions. Can progress to eclampsia.
25. **premature infant (prē-mă-CHŪR IN-fănt)**
- infant born before completing 37 weeks of gestation (also called preterm infant)
26. **puerperium (pū-ĕr-PĒ-rē-ŭm)**
- period from delivery until the reproductive organs return to normal (approximately six weeks)
27. **quickening (KWĪK-ĕn-ĭng)**
- first feeling of movement of the fetus in utero by the pregnant woman
28. **stillborn (STIL-bōrn)**
- an infant that is born dead

Activity source: Obstetrics Words Not Built From Word Parts from *Medical Terminology*. by Grimm et al., licensed under CC BY 4.0. / Some H5P audio re-recorded by Tania Deane and David McCuaig and text version added.

Pronouncing and Defining Commonly Abbreviated Obstetrics Terms

Practice pronouncing and defining these commonly abbreviated obstetrics terms:

- AB (abortion)
- AFP (Alpha-fetoprotein test)
- AI (artificial insemination)
- CS, C-section (cesarean section)
- CVS (chorionic villus sampling)
- DOB (date of birth)
- EDD (expected or estimated date of delivery)

- FAS (fetal alcohol syndrome)
- FHR (fetal heart rate)
- G (gravida or pregnant)
- GPA (gravida, para, abortus – three figures representing a patient’s reproductive history)
- GYN (gynecology)
- IVF (in vitro fertilization)
- LH (luteinizing hormone)
- LMP (last menstrual period)
- multip (multipara)
- NB (newborn)
- OB (obstetrics)
- primip (primipara)
- RDS (respiratory distress syndrome)
- VBAC (vaginal birth after cesarean section)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Obstetrics- Pathology Report (Text version)

Use the words below to fill in the pathology report:

- salpingectomy
- ectopic
- ultrasound
- fallopian
- tube
- clots
- cassettes
- microscopic
- pregnancy

OBSTETRICS – PATHOLOGY REPORT

PATIENT NAME: Bonnie PERRY

AGE: 34

SEX: Female

DOB: May 3

PATIENT ID: 900132

DATE OF ADMISSION AND SURGERY: June 14

ADMITTING DIAGNOSIS: Ectopic pregnancy

SURGEON: Adam Vance, MD, OB/GYN

PATHOLOGY ID: Specimen No. 05-S-899

SPECIMEN RECEIVED: June 14 Specimen Reported: June 18

SURGICAL PROCEDURE: Right partial _____[Blank 1].

CLINICAL HISTORY: This 34-year-old white female had an _____[Blank 2] pregnancy as proven by pelvic _____[Blank 3].

TISSUE RECEIVED: Right fallopian tube.

GROSS DESCRIPTION: The specimen designated right _____[Blank 4] tube was examined reveals the presence of a fallopian tube measuring 5.9 cm in length and 2.3 cm in average diameter. Sectioning of the _____[Blank 5] shows it to be distended with blood _____[Blank 6] and possible field tissue. The sections were taken, and placed in three _____[Blank 7], A through C, for embedding.

MICROSCOPIC DESCRIPTION: _____[Blank 8] examination performed.

MICROSCOPIC DIAGNOSIS: Ruptured tubal _____[Blank 9].

Joseph Gibbs, MD, Anatomic & Clinical Pathology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your Answers: ¹

Activity source: Obstetrics- Pathology Report by Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Obstetrics Glossary Reinforcement Activity (Text version)

1. Termination of a pregnancy before the fetus is viable is called _____. [Blank 1].
 - a. Abortion
 - b. Amniocentesis
 - c. Gestation
2. The abnormal condition in pregnancy where the patient experiences hypertension, edema and proteinuria is called _____. [Blank 2].
 - a. Hyperemesis Gravidia
 - b. Preeclampsia
 - c. Dystocia
3. When the embryo implants any other place but the inner endo-uterine lining it is called a(n) _____. [Blank 3].
 - a. Ectopic pregnancy
 - b. Placenta Previa
 - c. Zygote intrafallopian transfer
4. A condition where the infant's head is larger than the pelvic outlet and therefore will require a c-section is called _____. [Blank 4].
 - a. Cephalopelvic disproportion
 - b. Cephalic version
 - c. Induction
5. A test conducted on the pregnant woman to assess the fetal heart rate is called _____. [Blank 5].
 - a. Alpha-fetoprotein test
 - b. Non-stress test
 - c. Meconium staining

Check your Answers:²

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Notes

1. 1.salpingectomy, 2.ectopic, 3.ultrasound, 4.fallopian, 5.tube, 6. clots, 7.cassettes, 8. Microscopic, 9.pregnancy
2. 1. Abortion, 2. Preeclampsia, 3. Ectopic pregnancy, 4. Cephalopelvic disproportion, 5.Non-stress test,

CHAPTER 9: CARDIOVASCULAR SYSTEM - HEART

Cardiovascular System – Heart

If you would like to review the textbook chapter content, please visit **Chapter 9: Cardiovascular System – Heart [New Tab]**.

Learning Objectives

- Identify the anatomy and describe the main functions of the heart
- Analyze, translate, and define medical terms and common abbreviations of the heart
- Practice the spelling and pronunciation of heart terminology
- Identify the medical specialties associated with the heart and explore common diseases, disorders, and diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the cardiovascular system – heart:

Prefixes

- a- (absence of, without)
- bi- (two)
- brady- (slow)
- dys- (bad, abnormal, painful, difficult)
- endo- (within, in)
- epi- (on, upon, over)
- hypo- (below, deficient)
- hyper- (above, excessive)

- inter- (between)
- pan- (all, total)
- peri- (surrounding, around)
- poly- (excessive, over, many)
- tachy- (fast, rapid)
- tri- (three)

Combining Forms

- angi/o (vessel)
- ather/o (yellowish, fatty plaque)
- arteri/o (artery)
- atri/o (atrium)
- cardi/o/ (heart)
- coron/o (crown or circle, heart)
- ech/o (sound)
- electr/o (electricity)
- isch/o (deficiency, blockage)
- my/o (muscle)
- myos/o (muscle)
- symptomat/o (symptom)
- thromb/o (clot)
- valv/o (valve)
- valvul/o (valve)
- vas/o (vessel)
- ven/o (vein)
- ventricul/o (ventricle)

Suffixes

- -ac (pertaining to)
- -ade (process of)
- -al (pertaining to)
- -apheresis (removal)
- -ar (pertaining to)
- -centesis (surgical puncture to aspirate fluid)
- -dynia (pain)
- -ectomy (excision, surgical removal)
- -emia (condition of blood)
- -genic (producing, originating, causing)
- -gia (pain)

- -gram (record, radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording, radiographic imaging)
- -ia (condition of, diseased state, abnormal state)
- -ic (pertaining to)
- -ion (process)
- -itis (inflammation)
- -lysis (loosening, dissolution, separating)
- -megaly (enlarged, enlargement)
- -logist (specialist, physician who studies and treats)
- -oma (tumor)
- -osis (abnormal condition)
- -ous (pertaining to)
- -pathy (disease)
- -penia (abnormal reduction in number)
- -pexy (surgical fixation, suspension)
- -plasty (surgical repair)
- -poiesis (formation)
- -sclerosis (hardening)
- -scope (instrument used to view)
- -scopy (process of viewing)
- -stasis (stop, stopping, controlling)
- -stenosis (narrowing, constriction)
- -tomy (cut into, incision)

Cardiovascular System – Heart Words

Cardiovascular System – Heart Medical Terms (Text Version)

Practice the following cardiovascular system – heart medical terms by breaking into word parts and pronouncing.

1. **endocarditis**

- end/o/card/itis
- Inflammation of the inner (lining) of the heart

2. **echocardiogram**

- ech/o/cardi/o/gram

- a record (using) sound of the heart

3. **bradycardia**

- brady/card/ia
- condition of slow heart (rate)

4. **electrocardiograph**

- electr/o/cardi/o/graph
- instrument used to record the electrical (activity) of the heart

5. **tachycardia**

- tachy/card/ia
- condition of fast/rapid heart (rate)

6. **pericardiocentesis**

- peri/cardi/o/centesis
- Surgical puncture to aspirate fluid from the (sac) surrounding the heart

7. **electrocardiogram**

- electr/o/cardi/o/gram
- a record of electrical (activity) of the heart

8. **electrocardiography**

- electr/o/cardi/o/graphy
- process of recording the electrical (activity) of the heart

9. **valvulitis**

- valvul/itis
- inflammation of a valve

10. **pericarditis**

- peri/card/itis
- inflammation of the (sac) surrounding the heart

11. **asymptomatic**

- a/symptomat/ic
- pertaining to without symptoms

12. **myocarditis**

- my/o/card/itis
- inflammation of the muscle of the heart

13. **cardiomegaly**

- cardi/o/megaly
- enlarged heart

14. **atherosclerosis**

- ather/o/scler/osis
- abnormal condition of plaque (build up) causing constriction

15. **valvuloplasty**

- valvul/o/plasty
- surgical repair of a valve

16. **Cardiologist**

- Cardi/o/logist
- A physician who studies and treats diseases of the heart

17. **cardiac**

- cardi/ac
- pertaining to the heart

18. **cardiology**

- cardi/o/logy
- study of the heart

19. **atrioventricular**

- atri/o/ventricul/ar
- pertaining to the atrium and ventricle

20. **cardiogenic**

- cardi/o/genic
- originating in the heart

21. **cardiomyopathy**

- cardi/o/my/o/pathy
- disease of the heart muscle

Activity source: Cardiovascular System – Heart Medical Terms by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Cardiovascular System – Heart Medical Terms

Cardiovascular System – Heart Terms Not Easily Broken Down (Text Version)

Practice the following **cardiovascular system** words by breaking into word parts and pronouncing.

1. **arrhythmia**
 - deviation in the normal pattern (rhythmn) of a heartbeat
2. **congenital**
 - present at birth
3. **stethoscope**
 - An instrument used to hear heart and lung sounds
4. **aneurysm**
 - localized dilation of the wall of a blood vessel
5. **diastole**
 - Phase in the cardiac cycle where heart muscles relax allowing the chambers to fill with blood.
6. **bruit**
 - abnormal blowing, swishing heart sound heard on auscultation
7. **syncope**
 - brief lapse in consciousness (faint)
8. **auscultation**
 - listening to a patient's heart sounds
9. **occlude**
 - block or close tightly
10. **sphygmomanometer**
 - instrument used to measure blood pressure
11. **diaphoresis**
 - profuse (excessive) sweating
12. **myocardial infarction (MI)**

- heart attack, caused by lack of blood flow and oxygen to the heart

13. **systole**

- Phase in cardiac cycle when ventricles contract and eject blood

Activity source: Cardiovascular System – Heart not easily broken down by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Commonly Abbreviated Cardiovascular System – Heart Terms

Practice pronouncing and defining these commonly abbreviated cardiovascular system – heart terms:

- ACS (acute coronary syndrome)
- AED (automated external defibrillator)
- AFib (atrial fibrillation)
- AI (aortic insufficiency)
- AS (aortic stenosis)
- ASD (atrial septal defect)
- ASHD (arteriosclerotic heart disease)
- AV (atrioventricular)
- BP (blood pressure)
- BPM (beats per minute)
- CABG (coronary artery bypass graft)
- CAD (coronary artery disease)
- CCU (coronary care unit, cardiac care unit)
- CHD (coronary heart disease; chronic heart disease)
- CHF (congestive heart failure)
- CPR (cardiopulmonary resuscitation)
- DVT (deep vein thrombosis)
- ECG, EKG (electrocardiogram)
- ECHO (echocardiogram)
- HF (Heart Failure)
- HHD (hypertensive heart disease)
- HTN (hypertension)
- HR (heart rate)
- ICD (implantable cardioverter defibrillator)
- IV (intravenous)

- MI (Myocardial Infarction)
- PAD (peripheral artery disease)
- PTCA (percutaneous transluminal coronary angioplasty)
- SPECT (single-photon emission computed tomography)
- TEE (transesophageal echocardiogram)
- VSD (ventricular septal defect)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

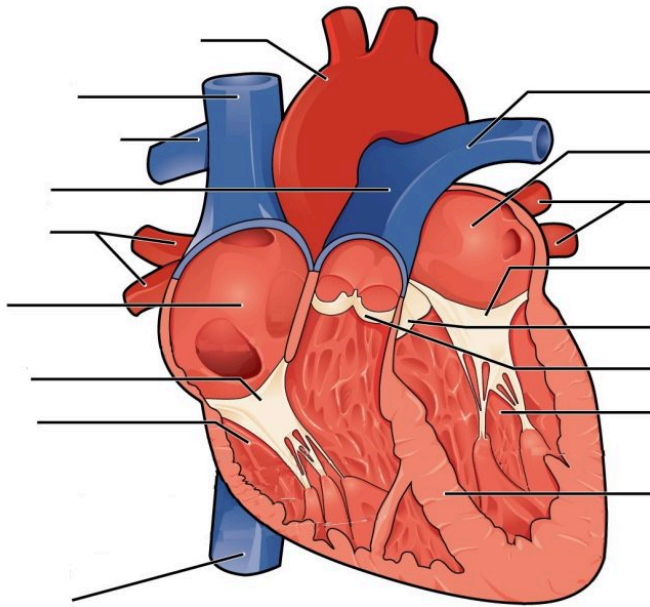
Cardiovascular System – Heart Structures

Label the following heart anatomy in the diagram below:

Cardiovascular System: The Heart Anatomy (Text Version)

Label the diagram with correct words listed below:

- | | | |
|----------------------------|--------------------------|----------------------------|
| 1. Aortic valve | 7. Inferior vena cava | 13. Right pulmonary veins |
| 2. Mitral (bicuspid) valve | 8. Left pulmonary artery | 14. Right pulmonary artery |
| 3. Aorta | 9. Right atrium | 15. Pulmonary valve |
| 4. Pulmonary trunk | 10. Left pulmonary veins | 16. left ventricle |
| 5. Tricuspid valve | 11. Left atrium | 17. Superior vena cava |
| 6. Interventricular septum | 12. Right ventricle | |



Anterior view

Cardiovascular System: The Heart Anatomy Diagram (Text Version)

This diagram shows the heart with an anterior view. The view shows from (from top, clockwise): the largest artery in the body known as the _____[Blank 1]. The _____[Blank 2] is shown which is the only vein in the body to carry oxygenated blood. The heart is divided into four chambers the _____[Blank 3] is one of the four chambers of the heart it is in the upper left portion of the heart. The _____[Blank 4] also known as the bicuspid valve contains two cusps or flaps and is positioned between the left atrium and lower left ventricle. The _____[Blank 5] is a structure located between the aorta and _____[Blank 6] of the heart which is the left lower chamber of the heart. The _____[Blank 7] is a thick wall of tissue divided the right side of the heart from the left. The _____[Blank 8] lies between the right atrium and pulmonary artery. The _____[Blank 9] is a large vein that carries deoxygenated blood to the heart. The _____[Blank 10] is the lower right chamber of the heart. The _____[Blank 11] lies between the right ventricle and the _____[Blank 12] which is the upper right chamber of the heart. The _____[Blank 13] transfer oxygenated blood from the lungs to the heart. The _____[Blank 14] is part of the _____[Blank 15] and transfers deoxygenated blood to the lungs. The _____[Blank 16] a large vein that returns deoxygenated blood from systemic circulation to the right atrium of the heart.

Check your answers: ¹

Activity source: Cardiovascular System: The Heart Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Cardiovascular System – Consultation Report (Text version)

Fill in the consultation report with the words listed below:

- shortness
- ECG
- implant
- embolism
- BP
- venous
- CBC and Diff
- hypercholesterolemia
- cardiovascular
- hypertension,
- WBC
- bradycardia
- intravenous

PATIENT NAME: Lorna GILBERT

AGE: 52

SEX: Female

DOB: February 27

DATE OF CONSULTATION: June 12

REQUESTING PHYSICIAN: Trevor Sharpe, MD, Family Medicine

CONSULTING PHYSICIAN: Kevin Palmer, MD, Cardiology

HISTORY: This 52-year-old female was referred to our cardiology clinic by her family physician Dr. Trevor Sharpe. She had visited her physician last month with complaints of persistent fatigue, dizziness, light-headedness, fainting, and an inability to exercise without experiencing _____[Blank 1] of breath. She claims that she is otherwise healthy; however, there is a history of _____[Blank 2] diseases in her family. Her father had developed DVT during a long flight and subsequently suffered from pulmonary _____[Blank 3]. Her mother had idiopathic intracranial _____[Blank 4] and died from MI at a relatively young age. The patient has 3 siblings, 2 of them suffering from hypertension and _____[Blank 5].

LABORATORY DATA: The laboratory results show normal _____[Blank 6]. Hemoglobin, Hct, _____[Blank 7] count, and platelet count are within normal range. The patient's PT and partial thromboplastin time are normal.

ALLERGIES: She is not allergic to any medications.

PHYSICAL EXAMINATION: Today the patient is alert and oriented but feels completely exhausted. She is also complaining of a mild chest pain. Her _____[Blank 8]- is 180/110. Heart rate is in the high 50s with irregular rate and rhythm. NECK: is supple, without jugular _____[Blank 9] distention or bruits. LUNGS: are clear, without wheezing, rhonchi, or rales.

IMPRESSION: I suspect the patient suffers from _____[Blank 10] and needs a pacemaker to regulate her heart rhythms. However, given the significant history of cardiovascular disorders in her family, I will order more tests before making a definite diagnosis.

PLAN: I will admit the patient to a telemetry bed and monitor her for 48 hours. If her chest pain worsens, she will be moved to CCU and will be treated with _____[Blank 11] nitroglycerin. An

_____ [Blank 12] has also been ordered to confirm bradycardia. If the ECG results confirm my speculations, the patient will be scheduled for a pacemaker _____ [Blank 13] as soon as possible.

Kevin Palmer, MD, Cardiology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

Activity source: Cardiovascular System – Consultation Report by Seedah Akram & Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY-4.0. /Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Cardiovascular System – Heart Glossary Reinforcement Activity (Text version)

1. _____ [Blank 1] is the ability of the blood vessels to dilate and constrict as needed.
 - a. Compliance
 - b. LDL
 - c. Syncope
2. A disorder in which too many red blood cells are produced is called _____ [Blank 2].
 - a. Mitral valve
 - b. Polycythemia
 - c. Great vessels
3. _____ [Blank 3] is difficult breathing.
 - a. Dyspnea
 - b. Pacemaker
 - c. Roots of the Great Vessels
4. A condition in which cells receive insufficient amounts of blood and oxygen is called _____ [Blank 4].

- a. Diaphoresis
 - b. Ischemic
 - c. Serous
5. Using extreme heat or extreme cold to destroy cells in part of the heart which were causing abnormal rhythms is called _____[Blank 5].
- a. Congenital
 - b. Ablation
 - c. Cyanosis

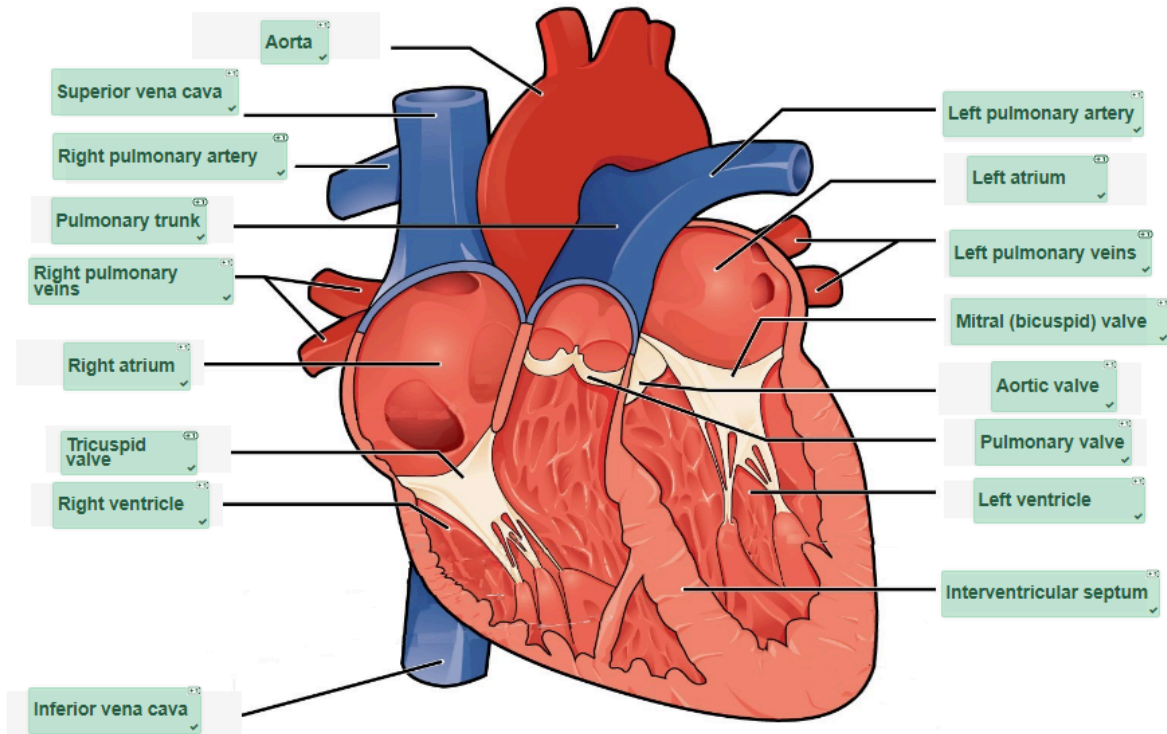
Check your Answers: ³

Activity source: Cardiovascular System – Heart Glossary Reinforcement Activity by Gisele Tuzon, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

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Notes



1.

Check your answers: Cardiovascular System: The Heart Anatomy Diagram (Text Version) This diagram shows the heart with an anterior view. The view shows from (from top, clockwise): the largest artery in the body known as the **aorta**. The **left pulmonary vein** is shown which is the only vein in the body to carry oxygenated blood. The heart is divided into four chambers the **left atrium** is one of the four chambers of the heart it is in the upper left portion of the heart. The **mitral valve** also known as the bicuspid valve contains two cusps or flaps and is positioned between the left atrium and lower left ventricle. The **aortic valve** is a structure located between the aorta and **left ventricle** of the heart which is the left lower chamber of the heart. The **interventricular septum** is a thick wall of tissue that divides the right side of the heart from the left. The **pulmonary valve** lies between the right ventricle and pulmonary artery. The **inferior vena cava** is a large vein that carries deoxygenated blood to the heart. The **right ventricle** is the lower right chamber of the heart. The **tricuspid valve** lies between the right ventricle and the **right atrium** which is the upper right chamber of the heart. The **right pulmonary veins** transfer oxygenated blood from the lungs to the heart. The **pulmonary trunk** is part of the **right pulmonary artery** and transfers deoxygenated blood to the lungs. The **superior vena cava** is a large vein that returns deoxygenated blood from systemic circulation to the right atrium of the heart.

2. 1. shortness 2. cardiovascular 3. embolism 4. hypertension 5. hypercholesterolemia 6. CBC and Diff 7. WBC 8. BP 9. venous 10. bradycardia 11. intravenous 12. ECG 13. implant

3. 1. Compliance, 2. Polycythemia, 3. Dyspnea, 4. Ischemic, 5. Ablation

CHAPTER 10: CARDIOVASCULAR SYSTEM - BLOOD VESSELS AND BLOOD

Cardiovascular System – Blood Vessels and Blood

If you would like to review the textbook chapter content, please visit **Chapter 10: Cardiovascular System – Blood Vessels and Blood [New Tab]**.

Learning Objectives

- Identify the anatomy and describe the main functions of blood vessels and the composition of blood
- Analyze, translate, and define medical terms and common abbreviations of blood vessels and the blood system
- Practice the spelling and pronunciation of blood vessel and blood system medical terminology
- Identify the medical specialties associated with the blood vessels and blood and explore common diseases, disorders, diagnostic test and procedures

Key Word Components

Identify meanings of key word components of the cardiovascular system – blood vessels and blood:

Prefixes

- a- (absence of, without)
- pan- (all, total)
- epi- (on, upon, over)
- inter- (between)
- peri- (surrounding, around)
- endo- (within, in)
- hypo- (below, deficient)

- hyper- (above, excessive)
- poly- (many, much)

Combining Forms

- angi/o (vessel, blood vessel)
- aort/o (aorta)
- arteri/o (artery)
- ather/o (fatty plaque)
- chrom/o (color)
- coagul/o (clotting)
- cyt/o (cell)
- eosin/o (red, dawn, rosy)
- erythr/o (red)
- hemat/o (blood)
- hem/o (blood)
- is/o (same, equal)
- isch/o (deficiency, blockage)
- lymph/o (lymph, lymph tissue)
- lymphaden/o (lymph node, lymph tissue)
- leuk/o (white)
- myel/o (bone marrow, spinal cord)
- mon/o (one, single)
- neutr/o (neutral; neither base nor acid)
- phag/o (eat, swallow)
- phleb/o (vein)
- plasm/o (plasma)
- poikil/o (varied, irregular)
- therm/o (heat)
- thromb/o (clot)
- thym/o (thymus gland)
- splen/o (spleen)
- ven/o (vein)

Suffixes

- -ac (pertaining to)
- -apheresis (removal)
- -ar (pertaining to)
- -blast (immature cell, embryonic)
- -centesis (surgical puncture to aspirate fluid)

- -cytosis (abnormal condition of cells (increase in cells))
- -ectomy (excision, surgical removal)
- -emia (in the blood)
- -genic (producing, originating, causing)
- -globin (protein)
- -gram (record, radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording, radiographic imaging)
- -ia (condition of, diseased state, abnormal state)
- -ic (pertaining to)
- -itis (inflammation)
- -logist (specialist who studies and treats)
- -logy (specialty)
- -lysis (loosening, dissolution, separating)
- -megaly (enlarged, enlargement)
- -logist (specialist, physician who studies and treats)
- -oid (resembling)
- -oma (tumor)
- -osis (abnormal condition)
- -ous (pertaining to)
- -pathy (disease)
- -penia (abnormal reduction in number)
- -pexy (surgical fixation, suspension)
- -phage (eat, swallow)
- -plasty (surgical repair)
- -poiesis (formation)
- -sclerosis (hardening)
- -stenosis (narrowing, constriction)
- -scope (instrument used to view)
- -scopy (process of viewing)
- -stasis (stop, stopping, controlling)
- -stenosis (narrowing, constriction)
- -tomy (cut into, incision)

Cardiovascular System – Blood Vessels and Blood Words

Cardiovascular System – Blood, medical terms (Text Version)

Practice the following cardiovascular system words by breaking into word parts and pronouncing.

1. **angioscope (angi/o/scope)**
 - Instrument used for visual examination of blood vessels
2. **arteriogram(arteri/o/gram)**
 - radiographic image of an artery
3. **phlebectomy(phleb/ectomy)**
 - excision of a vein
4. **hemolysis(hem/o/lysis)**
 - dissolution of (red) blood (cells)
5. **multiple myeloma(multiple myel/oma)**
 - tumours of the bone marrow
6. **lymphoma (lymph/oma)**
 - tumour of lymphatic tissue (malignant)
7. **thrombocytopenia(thromb/o/cyt/o/penia)**
 - abnormal reduction of (blood) clotting cells
8. **polyarteritis (poly/arter/itis)**
 - Inflammation of many (sites in the) arteries
9. **angiосcopy(angi/o/scopy)**
 - visual examination of blood vessels
10. **intravenous (IV) (intra/ven/ous)**
 - pertaining to within a vein
11. **thrombophlebitis (thromb/o/phleb/itis)**
 - inflammation of a vein associated with a (blood) clot
12. **pancytopenia (pan/cyt/o/penia)**
 - abnormal reduction of (all) blood cells
13. **plasmapheresis (plasm/apheresis)**
 - removal of plasma
14. **hematopoiesis (hemat/o/poiesis)**
 - formation of blood (cells)
15. **lymphadenopathy (lymphaden/o/pathy)**

- disease of lymph nodes
- 16. **thrombosis(thromb/osis)**
 - abnormal condition of (blood) clot
- 17. **venogram (ven/o/gram)**
 - radiographic image of a vein
- 18. **hematology (hemat/o/logy)**
 - study of blood
- 19. **aortic stenosis (aort/ic stenosis)**
 - narrowing, pertaining to the aorta
- 20. **angioplasty (angi/o/plasty)**
 - surgical repair of a blood vessel
- 21. **aortogram (aort/o/gram)**
 - Radiographic image of the aorta
- 22. **splenomegaly (splen/o/megaly)**
 - enlarged spleen
- 23. **thrombolysis (thromb/o/lysis)**
 - dissolution of a (blood) clot
- 24. **splenopexy (splen/o/pexy)**
 - surgical fixation of the spleen
- 25. **endarterectomy(end/arter/ectomy)**
 - Rebel does not follow the rules
 - Excision within the artery
- 26. **hypothermia (hypo/therm/ia)**
 - condition of (body) temperature that is below (normal)
- 27. **thrombus (thromb/us)**
 - (blood) clot (attached to the interior wall of artery or vein)
- 28. **hematologist (hemat/o/logist)**
 - Physician who specializes and treats blood disorders
- 29. **thymoma (thym/oma)**

- tumour of the thymus gland
- 30. **hematoma (hemat/oma)**
 - tumour composed of blood
- 31. **arteriosclerosis (arteri/o/sclerosis)**
 - hardening of the arteries
 - hardening of fatty plaque (on arterial wall)
- 32. **thymectomy (thym/ectomy)**
 - excision of the thymus gland
- 33. **angioma (angi/oma)**
 - tumour composed of blood vessels
- 34. **atherosclerosis (ather/o/sclerosis)**
 - hardening of fatty plaque
- 35. **lymphadenitis (lymphaden/itis)**
 - inflammation of lymph nodes
- 36. **myelopoiesis (myel/o/poiesis)**
 - formation of bone marrow
- 37. **angiography(angi/o/graphy)**
 - radiographic imaging of blood vessels
- 38. **angiostenosis (angi/o/stenosis)**
 - narrowing of a blood vessel
- 39. **hemostasis (hem/o/stasis)**
 - stoppage of bleeding
- 40. **leukocytopenia (leuk/o/cyt/o/penia)**
 - abnormal reduction of white (blood) cells
- 41. **splenectomy (splen/ectomy)**
 - Excision of the spleen
- 42. **phlebotomy (phleb/o/tomy)**
 - incision into a vein
- 43. **phlebitis(phleb/itis)**

- inflammation of a vein

44. **erythrocytopenia (erythr/o/cyt/o/penia)**

- abnormal reduction of red (blood) cells

45. **atherectomy (ather/ectomy)**

- Excision of fatty plaque

Activity source: “Cardiovascular System – Blood, medical terms” by Kimberlee Carter, licensed under CC BY-4.0 from “Cardiovascular System – Blood Vessels and Blood” in Building a Medical Terminology Foundation by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Converted to Text.

Pronouncing and Defining Cardiovascular System – Blood Vessels and Blood Medical Terms

Cardiovascular System – Blood Terms Not Easily broken down (Text Version)

Practice the following cardiovascular blood terms by breaking into word parts and pronouncing.

1. **phlebotomist**

- A specially trained person who draws blood or injects IV fluids

2. **anaphylaxis**

- exaggerated reaction to a previously encountered antigen may start out as mild reaction but can quickly become severe resulting in anaphylactic shock

3. **anemia**

- reduction in number of erythrocytes

4. **immunodeficiency**

- deficient immune response caused by immune system dysfunction brought on by disease or immune suppressive drugs.

5. **ischemia**

- condition of deficient blood flow due to a constriction or obstruction of a blood vessel

6. **sepsis**

- toxic condition due to spread of bacteria or their toxins from an infection

Activity source: “Cardiovascular System – Blood Terms Not Easily Broken Down” by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY-4.0. / Text version added.

Pronouncing and Defining Commonly Abbreviated Cardiovascular System – Blood Vessels and Blood Terms

Practice pronouncing and defining these commonly abbreviated cardiovascular system – blood vessels and blood terms:

- Ab (antibody)
- ABO (four main blood types – A, B, AB, O)
- aPTT (activated partial thromboplastin time)
- baso (basophils)
- CBC and Diff (complete blood count and differential)
- CPK (creatine phosphokinase)
- EBV (Epstein-Barr virus; cause of mononucleosis)
- EPO (erythropoietin)
- H&H (hemoglobin and hematocrit lymphs)
- Hct (hematocrit)
- Hgb (hemoglobin)
- mono (monocyte)
- PT (prothrombin time)
- PTT (partial thromboplastin time)
- RBC (red blood cell, erythrocyte)
- Sed Rate (erythrocyte sedimentation rate)
- WBC (white blood cell, leukocyte)
- WNL (within normal limits)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Cardiovascular System – Consultation Report (Text version)

Fill in the consultation report with using the following words:

- Angiogram
- defect
- palpitations
- infection
- blood pressure
- coronary

PATIENT NAME: Jack MIRANDA

AGE: 74

SEX: Male

DATE OF CONSULTATION: March 26, 2020

CONSULTING PHYSICIAN: Kevin Palmer, MD, Cardiology

REASON FOR CONSULTATION: Coronary artery disease.

PAST MEDICAL HISTORY

1. Coronary artery disease. He had an NST MI in July 2015. _____[Blank 1] showed three-vessel disease and had PCT of RCA OM1. LAD had 60% stenosis which was no significant by FFR and medical management was recommended. He had a Grade 2 left ventricular function after the MI, but it improved a year later. His last echocardiogram in 2019 showed preserved ejection fraction at 60 with no significant valvular abnormalities and no significant wall motion abnormalities. He had an exercise Myoview in 2018 where he could achieve a workload of 9 Mets without symptoms or electrical changes. Perfusion images showed a wall fixed inferior _____[Blank 2] in keeping with his

previous inferior MI.

2. Hypertension.
3. Hypercholesterolemia.
4. Ex-smoker quit in 2016.
5. Rare alcohol.
6. Gout.
7. Chronic lymphocytic leukemia.

MEDICATIONS

Aspirin 81 mg q.d.

Bisoprolol 5 mg q.d.

Candesartan 60 mg q.d.

Atorvastatin 80 mg q.d.

Ezetrol 10 mg q.d.

Allopurinol 300 mg q.d.

HISTORY: Overall, he has been feeling well. He denies any exertional symptoms with usual activity. He walks his dog 20 minutes a day and denies any chest pain, shortness of breath. He denies orthopnea, _____[Blank 3], dizziness presyncope, or syncope.

He was recently hospitalized with a respiratory _____[Blank 4]. He was treated with antibiotics and was discharged 2 days later. He has been feeling better and has gone back to his usual activities.

In regards to his CLL, he has been stable with usual lymphocyte count around 30. No other cytopenia. No splenomegaly. He is being followed with a surveillance strategy with regular CBCs by hematologist.

PHYSICAL EXAMINATION: On physical exam he is alert and oriented in no acute distress, hemodynamically stable, _____[Blank 5] 120/70, heart rate 60 with regular rhythm, there is no evidence of volume overload, lungs are clear. Lab work showed white cell count of 30 with lymphocytes, 25 hemoglobin, 122 platelets, 340 creatinine, 70 EGFR, 75 sodium, 144 potassium, 5.6, A1c 5.4L, DL 1.2.

SUMMARY: Mr. Miranda seems to be stable from the cardiac point of view. He has a history of _____[Blank 6] artery disease with previous MI treated with PCI of RCA and OM1. He has a residual 60% stenosis of LAD that was not significant by FFR. He is on antiplatelet agents, high intensity statin therapy, and the combination of ARB's and beta-blockers. As long as his functional capacity remains stable, we do not need to do a follow up. Exercise treadmill test but should his symptoms change, this should be considered.

PLAN: His blood pressure is well controlled. His LDL is within the goal. There is no history of diabetes. He quit smoking 2016. I made no changed to his current treatment plan and advised him to come back in a year's time and earlier, should symptoms change.

Kevin Palmer, MD, Cardiology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers:¹

Activity source: Neurological System – History and Physical Examination by Sheila Bellefeuille & Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Cardiovascular System -Blood Vessels and Blood Glossary (Text version)

1. Proteins produced by B lymphocytes in response to a non-self antigen are called _____[Blank 1].
 - a. Antibodies
 - b. Capillaries
 - c. Macrophages
2. An autoimmune disorder in which the body mounts an immune response against its own joint tissues, causing inflammation and damage to the joints is referred to as _____[Blank 2].
 - a. Rheumatoid Arthritis
 - b. Sickle Cell Disease
 - c. Crohn Disease
3. A freely moving piece of a substance (plaque or blood clot) that travels through the circulation until it blocks a smaller blood vessel, cutting of the supply of oxygen to the tissue is called _____[Blank 3].
 - a. Embolus
 - b. Perfusion
 - c. Perfusion
4. _____[Blank 4] is the thickness of fluids that affects their ability to flow.
 - a. Viscosity
 - b. Pneumothorax
 - c. Thrombosis
5. The process by which the body seals a ruptured blood vessel to prevent further blood loss is called _____[Blank 5].
 - a. Homeostasis
 - b. Hemostasis

c. Hemopoiesis

Check your answers: ²

Activity source: Cardiovascular System -Blood Vessels and Blood Glossary by Tiffany Hunt, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Converted to Text.

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Notes

1. 1) Angiogram 2) defect 3) palpitations 4) infection 5) blood pressure 6) coronary
2. 1. Antibodies, 2. Rheumatoid Arthritis, 3. Embolus, 4. Viscosity, 5. Hemostasis

CHAPTER II: LYMPHATIC AND IMMUNE SYSTEMS

Lymphatic and Immune Systems

If you would like to review the textbook chapter content, please visit **Chapter 11: Lymphatic and Immune Systems** [New Tab].

Learning Objectives

- Identify the anatomy and describe the main functions of lymphatic and immune systems
- Identify and describe the organization of the lymphatic system
- Analyze, translate, and define medical terms and common abbreviations of the lymphatic and immune systems
- Practice the spelling and pronunciation of lymphatic and immune system medical terminology medical terms of the lymphatic and immune systems
- Identify the medical specialties associated with lymphatic and immune systems and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the lymphatic and immune systems:

Prefixes

- a- (absence of, without)
- an- (absence of, without)
- ana- (up, upward or back, backward)
- brady- (slow)
- inter- (between)

- pan- (all)

Combining Forms

- immun/o (immune, immunity)
- lymph/o (lymph, lymph tissue)
- lymphaden/o (lymph gland, lymph node)
- myel/o (bone marrow, spinal cord)
- splen/o (spleen)
- thym/o (thymus gland)
- tox/o (poison)

Suffixes

- -ac (one affected with)
- -apheresis (withdrawal or removal)
- -cyte (cell)
- -ectomy (excision, cut out)
- -itis (inflammation)
- -logist (specialist, physician who studies and treats)
- -logy (study of)
- -megaly (enlarged, enlargement)
- -oid (resembling)
- -oma (tumor, swelling)
- -osis (abnormal condition)
- -pathy (disease)
- -penia (decrease, deficiency)
- -poiesis (formation, production)
- -rrhaphy (suturing)

Lymphatic and Immune Systems Words

Pronouncing and Defining Lymphatic and Immune Systems Medical Terms

Lymphatic System Medical Terms Not Easily Broken Down (Text Version)

Practice the following lymphatic system words by breaking into word parts and pronouncing.

1. **allergen**

- Substance capable of producing an allergic (hypersensitivity) reaction

2. **Allergist**

- Specialist who studies and treats allergies

3. **allergy**

- inflammatory response due to a hypersensitivity to a substance

4. **acute inflammation**

- Inflammation occurring for a limited time period, rapidly developing

5. **afferent lymphatic vessels**

- vessels that lead into a lymph node

6. **antibody**

- antigen-specific protein secreted by plasma cells, immunoglobulin

7. **antigen**

- molecule recognized by the receptors of b and t lymphocytes

8. **chronic inflammation**

- Inflammation occurring for long periods of time

9. **chyle**

- lipid-rich lymph inside the lymphatic capillaries of the small intestine

10. **efferent lymphatic vessels**

- vessels that lead out of a lymph node

11. **erythroblastosis fetalis**

- Also called HDN (hemolytic disease of newborn) disease of RH-positive newborns in RH-negative mothers with multiple RH-positive children. Resulting from the action of maternal antibodies against fetal blood.

12. **Graft-versus-host disease (GVHD)**

- In bone marrow transplants, occurs when the transplanted cells mount an immune response against the recipient

13. **immunological memory**

- ability of the adaptive immune response to mount a stronger and faster immune response upon re-exposure to a pathogen

14. **innate immune response**

- rapid but relatively non-specific immune response

15. **lymph**

- fluid contained within the lymphatic system

16. **lymph node**

- one of the bean-shaped organs found associated with the lymphatic vessels

17. **Severe combined immunodeficiency disease (SCID)**

- Genetic mutation that affects both t cell and b cell arms of the immune response

18. **Spleen**

- Secondary lymphoid organ that filters pathogens from the blood and remove degenerating or damage blood cells

19. **Thymus**

- Primary lymphoid organ, where t lymphocytes proliferate and mature

20. **Tonsils**

- Lymphoid nodules associated with the nasopharynx

21. **vaccine**

- An agent administered by injection, orally or nasal spray that provides active acquired immunity to a particular infectious disease.

22. **Apoptosis**

- Programmed Cell Death

23. **Bone Marrow**

- tissue found inside bones, the site of all blood cell differentiation and maturation of b lymphocytes

24. **Immunity**

- Post infection, memory cells remain in the body providing an immune response to the same

pathogen. This protects us from getting sick by the same pathogen

25. **Histamine**

- Vasoactive mediator in granules of mast cells
Primary cause of allergies and anaphylactic shock

26. **Inflammation**

- Immune response characterized by heat, redness, pain, and swelling

27. **Interstitial**

- Between cells of the tissues

28. **Interstitial Space**

- Spaces between individual cells in the tissues

29. **Passive Immunity**

- Transfer of immunity (usually by injection of antibodies) to a pathogen by an individual who lacks immunity.

Activity source: Endocrine System Medical Terms by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Converted to Text.

Pronouncing and Defining Commonly Abbreviated Lymphatic and Immune Systems Terms

Practice pronouncing and defining these commonly abbreviated lymphatic and immune systems terms:

- AIDS (acquired immunodeficiency syndrome)
- CBC and Diff (complete blood count and differential)
- CD4+ Cell (helper T cell)
- CD8+ Cell (cytotoxic T cell)
- CMV (cytomegalovirus- causes opportunistic AIDS-related infection)
- Crypto (Cryptococcus- causes opportunistic AIDS-related infection)
- ELISA (enzyme-linked immunosorbent assay – test to detect anti-HIV antibodies)
- G-CSF (granulocyte colony-stimulating factor – cytokine that promotes neutrophil production)
- GM-CSF (granulocyte macrophage colony-stimulating factor – cytokine secreted by macrophages to promote growth of myeloid progenitor cells and their differentiation to granulocytes)
- GVHD (Graft-versus-host Disease)

- HAART (highly active antiretroviral therapy – use of combinations of drugs that are effective against AIDS)
- Hct (hematocrit)
- HDN (hemolytic disease of the newborn)
- Hgb (hemoglobin)
- Histo (histoplasmosis-fungal infection seen in AIDS patients)
- HIV (human immunodeficiency virus)
- HSV (herpes simplex virus)
- Iga, IgD, IgE, IgG, IgM (immunoglobulins)
- IL1 to IL38 (interleukins)
- IV (Intravenous)
- KS (Kaposi sarcoma)
- MAI (Mycobacterium avium-intracellulare (MAI) complex – group of pathogens that cause lung and systemic disease in immunocompromised patients)
- MoAb (monoclonal antibody)
- NHL (non-Hodgkin lymphoma)
- PCP (Pneumocystis pneumonia-opportunistic AIDS-related infection)
- PI (protease inhibitor)
- SCID (severe combined immunodeficiency)
- SPECT (single-photon emission computed tomography)
- Treg (regulatory T cell (suppressor T cell)
- Toxo (toxoplasmosis- parasitic infection associated with AIDS)
- WBC (White Blood Cell)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

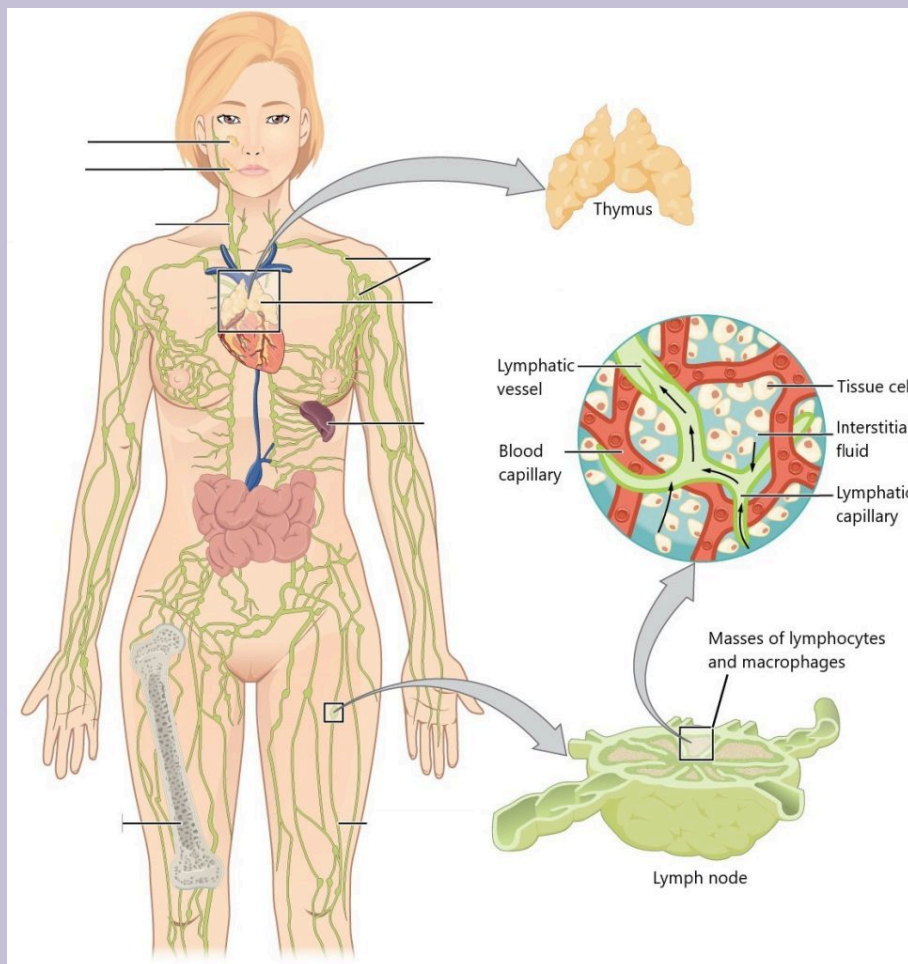
Lymphatic and Immune Systems Structures

Label the following lymphatic system anatomy:

Lymphatic System Anatomy (Text Version)

Label the diagram with correct words listed below:

- | | | |
|----------------|----------------|--|
| 1. Adenoid | 4. Thymus | 7. Right lymphatic duct, entering vein |
| 2. Lymph nodes | 5. Bone marrow | 8. Lymph vessel |
| 3. Tonsil | 6. Spleen | |



Lymphatic System Anatomy Diagram (Text Version)

The diagram shows a female human body standing upright, and the entire lymphatic system is shown and labeled (clockwise from top): The _____[Blank 1] is a small gland located in the centre of the chest and it is responsible for supporting the immune function by producing T-cells a type of white blood cell which fights infections and diseases. A collection of oval shaped structures known as _____[Blank 2] serve as filtration units. The _____[Blank 3] is an organ located under the left part of the diaphragm and is responsible for blood

filtration. Thin-walled tube known as a _____[Blank 4] carry lymph tissue throughout the body. The _____[Blank 5] is a primary site for T-cell activity in the lymphatic system. The _____[Blank 6] receives lymph fluid from the right side of the head, neck, and thorax, as it drains the venous system. Located at the back of the throat is a fleshy structure known as the _____[Blank 7] and serves as the first line of defence against inhaled harmful substances. Located in the nasopharyngeal region is the _____[Blank 8] which also filter and trap harmful substances from entering the body. The right panel shows magnified images of the thymus and the lymph node. Labels read (clockwise from top): tissue cell, interstitial fluid, lymphatic capillary, blood capillary, lymphatic vessel. Label of lymph node reads masses of lymphocytes and macrophages.

Check your answers ¹

Activity source: Lymphatic System Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Lymphatic System – Medical Report (Text version)

Fill in the following medical reporting using the words listed below:

- itchy
- runny
- allergies
- dander
- medications
- distress
- heart
- drainage
- Dyspnea
- rhinitis
- iron

PATIENT NAME: Sally WESSON

AGE: 43

SEX: Female

DOB: September 26

DATE OF ASSESSMENT: March 20

ATTENDING PHYSICIAN: Trevor Sharpe, MD

CHIEF COMPLAINT: Allergies.

HISTORY: A 43-year-old Asian female states being very tired and irritable. She had presented watery and _____[Blank 1] eyes, itchy throat, sneezing, _____[Blank 2] and stuffy nose. She has family history of _____[Blank 3]. She always struggled with many different allergies: dust, pollen, cat and dog _____[Blank 4]. She had tried different types of over-the-counter allergy _____[Blank 5], but they didn't help to alleviate the symptoms. She is currently taking Reactine 5 mg daily which does not relieve all of her symptoms.

PHYSICAL EXAMINATION: GENERAL: Patient is pale and in moderate _____[Blank 6]. VITAL SIGNS: Weight 160 pounds, B/P 120/80, _____[Blank 7] rate 90 beats per minute, respiratory rate 18 per minute, temperature 98.6 F. HEENT: EYES: Red, watery, itching, burning and swelling. EARS: Normal. NOSE: Mouth breathing, sneezing, runny and itchy nose, post-nasal _____[Blank 8], nasal congestion. THROAT: Itchy and swollen. CHEST: _____[Blank 9] and wheezing.

MEDICATIONS

1. Reactine 5 mg _____[Blank 10].
2. Escitalopram 20 mg q.d.
3. Lorazepam 0.5 mg p.r.n. nightly at bedtime.
4. Fenofibrate 145 mg q.h.s.

ASSESSMENT

1. Patient has severe seasonal allergic _____[Blank 11].
2. Possible anemia.

PLAN

1. Recommended Reactive 10 mg q.d.
2. Referred to an allergist to provide patient more options for allergy treatments.
3. Ordered a blood work to check her _____[Blank 12] and cholesterol levels.
4. Follow up in 4 days to review her blood work results.

Trevor Sharpe, MD

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers:²

Activity source: "Lymphatic System – Medical Report" by Sheila Bellefeuille & Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Lymphatic System – Medical Report (Text version)

Fill in the following medical report using the words listed below:

- stones
- fatigued
- fever
- tonsillitis
- temperature
- cervical
- dysphagia
- erythema
- crypts
- tonsillolith
- pseudomembranes
- tonsillectomy
- gargles

PATIENT NAME: Celine CAMERON

AGE: 16

SEX: Female

DOB: March 25

DATE OF ASSESSMENT: August 4

ATTENDING PHYSICIAN: Grant Talbot, MD, Pediatrics

HISTORY: This is a 16-year-old female today with complaints of throat pain. She has been struggling with inflamed tonsils for the last 2 weeks. The patient claims that tonsil _____[Blank 1] are forming and that a white film has appeared over their tonsils. She has been feeling very _____[Blank 2], has developed a mild _____[Blank 3] and occasionally feel nauseous.

The client has a family history of _____[Blank 4] resulting in tonsillectomy. She mentioned that her grandmother experienced recurrent tonsillitis around the same age. The condition of tonsillitis has occurred on 2 other occasions in the past 5 months.

PHYSICAL AND EXAMINATION: Ms. Cameron is in no acute distress. She appears fatigued. VITAL SIGNS: Blood Pressure 132/83, _____[Blank 5] is slightly elevated at 99.6, pulse 67. She is in generally in good condition. Throat palpation was performed. There is significant enlargement of the _____[Blank 6] lymph nodes. She appears to be experiencing _____[Blank 7]. Throat was examined and revealed swelling, _____[Blank 8] and tonsillar _____[Blank 9] visible. A _____[Blank 10] was seen to be forming within one of the crypts. Celine's claims of _____[Blank 11] were also confirmed. She denies any symptoms such as a nasal discharge, cough, or abdominal pain. Throat was swabbed.

ASSESSMENT: Ms. Cameron appears to be experiencing recurrent tonsillitis correlated to exaggerated tonsillar crypts. Possible _____[Blank 12] may be required.

PLAN

1. Patient was given a referral to an ENT specialist and may require tonsillectomy.
2. The patient was instructed to follow a diet of soft, smooth foods and soothing liquids.
3. It was suggested that the patient use saltwater _____[Blank 13] in the mornings and before bed.
4. A prescription of Amoxicillin 400 mg p.o. p.c.

Grant Talbot, MD, Pediatrics

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

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Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Lymphatic System – Medical Report (Text version)

Fill in the following medical report using the words listed below:

- dysphagia
- prescribed
- lymph
- enlarged
- ibuprofen
- erythromycin
- tonsillectomy
- surgery

PATIENT NAME: Jason MACDONALD

AGE: 7

SEX: Male

DOB: August 19

DATE OF ASSESSMENT: November 15

ATTENDING PHYSICIAN: Grant Talbot, MD, Pediatrics

DIAGNOSIS: Tonsillitis

HISTORY: This 7-year-old white male has been seen by me on several occasions over the last two years. He has complained of pharyngitis, _____[Blank 1], and fever. I have _____[Blank 2] erythromycin in the past.

PHYSICAL EXAMINATION: When I examined Jason today, he once again had the same complaints as in the past. I also noticed that the _____[Blank 3] nodes in his neck were _____[Blank 4] and tender. He had a temperature of 39 degrees.

TREATMENT: I gave Jason _____[Blank 5] for his fever and prescribed _____[Blank 6] again.

PLAN: It is my recommendation that Jason undergo a _____[Blank 7]. Jason's parents are in agreement. I will make the arrangements for Jason's _____[Blank 8].

Grant Talbot, MD, Pediatrics

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ⁴

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Test Your Knowledge

Test your knowledge by answering the questions below:

Lymphatic and Immune Systems Glossary Reinforcement Activity (Text version)

1. Vasoactive mediator in granules of mast cells and is the primary cause of allergies and anaphylactic shock is called _____[Blank 1].
 - a. Histamine
 - b. Mast cell
 - c. Cisterna chyli
2. Large duct that drains lymph from the lower limbs, left thorax, left upper limb, and the left side of the head is referred to as _____[Blank 2].
 - a. Thoracic duct
 - b. Lymph
 - c. Plasma cell
3. _____[Blank 3] is the primary lymphoid organ; where t lymphocytes proliferate and mature.
 - a. Lymphatic capillaries
 - b. Thymus

- c. Antigen
4. Tissue found inside bones; the site of all blood cell differentiation and maturation of b lymphocytes are called _____[Blank 4].
- a. Neutrophil
 - b. Interferons
 - c. Bone marrow
5. Ability of the adaptive immune response to mount a stronger and faster immune response upon re-exposure to a pathogen is called _____[Blank 5].
- a. Immunological memory
 - b. Chemokine
 - c. Barrier defenses

Check your answers: ⁵

Activity source: Lymphatic and Immune Systems Glossary Reinforcement Activity by Gisele Tuzon, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY-4.0. / Text version added.

Downloadable Worksheets

View or download & print the PDF or Word format worksheet below:

Design Your Own Worksheet [New Tab]



An interactive H5P element has been excluded from this version of the text. You can view it online here:
<https://ecampusontario.pressbooks.pub/medicalterminology2studentworkbook/?p=325#h5p-59>

11. Lymphatic and Immune – Definitions [New Tab]

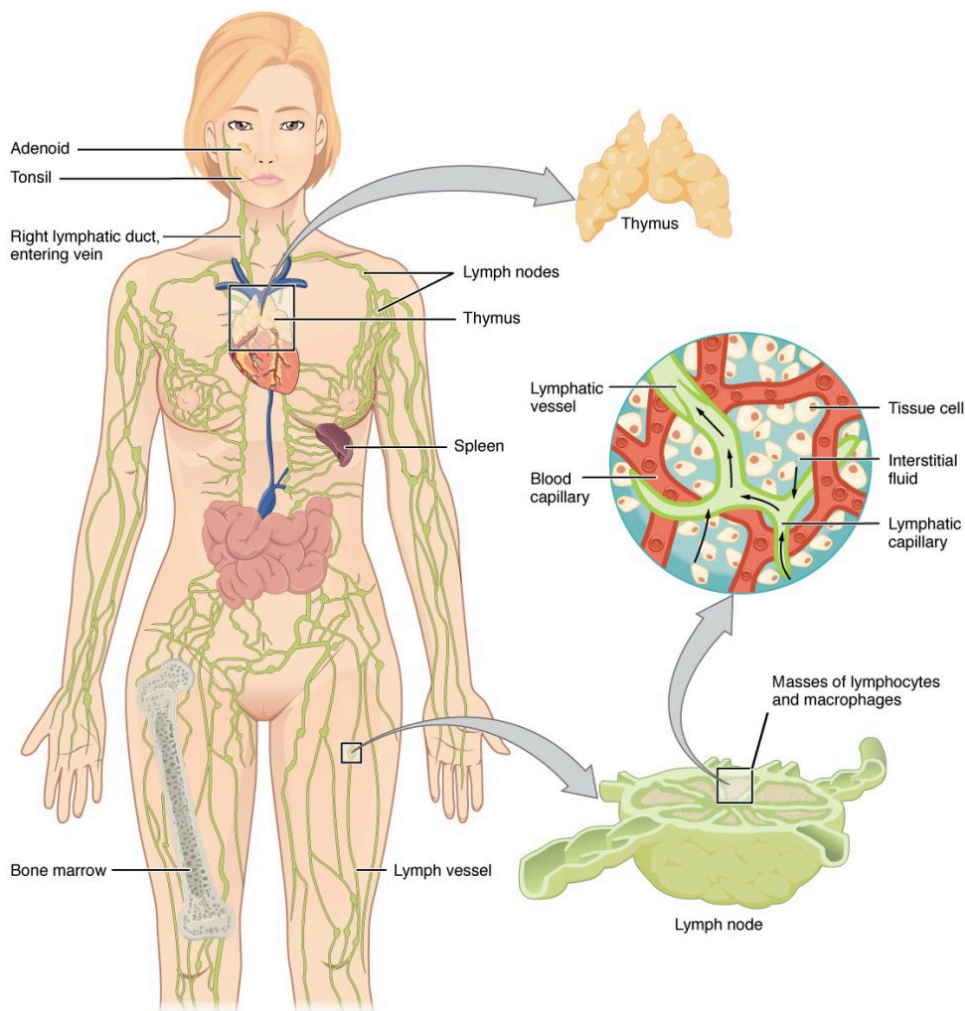


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Notes



1.

Lymphatic System Anatomy Diagram (Text Version) The diagram shows a female human body standing upright, and the entire lymphatic system is shown and labeled (clockwise from top): The **thymus** is a small gland located in the centre of the chest and it is responsible for supporting the immune function by producing T-cells a type of white blood cell which fights infections and diseases. A collection of oval shaped structures known as **lymph nodes** serve as filtration units. The **spleen** is an organ located under the left part of the diaphragm and is responsible for blood filtration. Thin-walled tube known as a **lymph vessel** carry lymph tissue throughout the body. The **bone marrow** is a primary site for T-cell activity in the lymphatic system. The **right lymphatic duct entering vein** receives lymph fluid from the right side of the head, neck, and thorax, as it drains the venous system. Located at the back of the throat is a fleshy structure known as the **tonsil** and serves as the first line of defence against inhaled harmful substances. Located in the nasopharyngeal region is the **adenoids** which also filter and trap harmful substances from entering the body. The right panel shows magnified images of the thymus and the lymph node. Labels read (clockwise from top): tissue cell,

Check your answers:

interstitial fluid, lymphatic capillary, blood capillary, lymphatic vessel. Label of lymph node reads masses of lymphocytes and macrophages.

2. 1. itchy, 2. runny, 3. allergies, 4. dander, 5. medication, 6. distress, 7. heart 8. drainage, 9. Dyspnea, 10. daily, 11. rhinitis, 12. iron
3. 1. stones, 2. fatigue, 3. fever 4. tonsillitis, 5. temperature, 6. cervical, 7. dysphagia, 8. erythema, 9. crypts, 10. tonsillolith, 11. pseudomembranes, 12. tonsillectomy, 13. gargles
4. 1. dysphagia, 2. prescribed, 3. lymph, 4. enlarged, 5. ibuprofen, 6. erythromycin, 7. tonsillectomy, 8. surgery
5. 1. Histamine 2. Thoracic duct, 3. Thymus, 4. Bone marrow, 5. Immunological memory.

CHAPTER 12: DIGESTIVE SYSTEM (GASTROINTESTINAL)

Digestive System (Gastrointestinal)

If you would like to review the textbook chapter content, please visit **Chapter 12: Digestive System (Gastrointestinal)** [New Tab].

Learning Objectives

- Identify the anatomy and describe the main functions of the digestive system and accessory structures
- Analyze, translate, and define medical terms and common abbreviations of the digestive system
- Practice the spelling and pronunciation of digestive system medical terminology
- Identify the medical specialties associated with the digestive system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the digestive system:

Prefixes

- hemi- (half)
- endo- (within, in)
- sub- (under, below)
- dys- (painful, abnormal, difficult, labored)

Combining Forms

- abdomin/o (abdomen, abdominal)
- an/o (anus)
- antr/o (antrum)
- append/o (appendix)
- appendic/o (appendix)
- cec/o (cecum)
- celi/o (abdomen, abdominal cavity)
- cheil/o (lip)
- cholangi/o (bile duct)
- chol/e (gall, bile)
- choledoch/o (common bile duct)
- col/o (colon)
- colon/o (colon)
- diverticul/o (diverticulum)
- duoden/o (duodenum)
- enter/o (intestine)
- esophag/o (esophagus)
- gastr/o (stomach)
- gingiv/o (gum)
- gloss/o (tongue)
- hepat/o (liver)
- herni/o (hernia, protrusion of an organ through a membrane or cavity wall)
- ile/o (ileum)
- jejun/o (jejunum)
- lapar/o (abdomen, abdominal cavity)
- lingu/o (tongue)
- or/o (mouth)
- palat/o (palate)
- pancreat/o (pancreas)
- peritone/o (peritoneum)
- polyp/o (polyp, small growth)
- proct/o (rectum)
- pylor/o (pylorus, pyloric sphincter)
- rect/o (rectum)
- sial/o (saliva, salivary gland)
- sigmoid/o (sigmoid colon)
- steat/o (fat)
- stomat/o (mouth)
- uvul/o (uvula)

Suffixes

- -ac (pertaining to)
- -al (pertaining to)
- -cele (hernia, protrusion)
- -centesis (surgical puncture to aspirate fluid)
- -ectomy (excision)
- -gram (the record, radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording)
- -ia (condition of, diseased state, abnormal state)
- -iasis (condition)
- -itis (inflammation)
- -logist (specialist or physician who studies and treats)
- -logy (study of)
- -malacia (softening)
- -oma (tumor)
- -osis (abnormal condition)
- -pathy (disease)
- -pepsia (digestion)
- -phagia (eating or swallowing)
- -plasty (surgical repair)
- -ptosis (prolapse, drooping)
- -rrhaphy (suturing, repairing)
- -rrhea (flow, discharge)
- -scope (instrument used for visualization)
- -scopy (process of viewing, visualization)
- -stomy (creation of an artificial opening)
- -tomy (incision, cut into)

Digestive System Words

Digestive System Medical Terms (Text Version)

Practice the following **digestive system** words by breaking into word parts and pronouncing.

1. **gastroenterology** (gastr/o/enter/o/logy)

- study of the stomach and intestines
- 2. **cholecystitis (chol/e/cyst/itis)**
 - inflammation of the gallbladder
- 3. **proctoscope (proct/o/scope)**
 - instrument used to view the rectum
- 4. **pyloroplasty (pylor/o/plasty)**
 - surgical repair of the pylorus
- 5. **hepatomegaly (hepat/o/megaly)**
 - enlarged liver
- 6. **gastric (gastr/ic)**
 - pertaining to the stomach
- 7. **cholangiography (cholangi/o/graphy)**
 - radiographic imaging of the bile duct
- 8. **gastroenterologist (gastr/o/enter/o/logist)**
 - specialist who studies and treats stomach and intestines
- 9. **cholangiogram (cholangi/o/gram)**
 - radiographic image of the bile duct
- 10. **hepatoma (hepat/oma)**
 - tumour of the liver
- 11. **pancreatitis (pancreat/itis)**
 - inflammation of the pancreas
- 12. **esophagogram (esophag/o/gram)**
 - radiographic image of the esophagus
- 13. **steatosis (steat/osis)**
 - abnormal condition of fat
- 14. **rectocele (rect/o/cele)**
 - protrusion of the rectum
- 15. **endoscope (endo/scope)**
 - instrument used to view within (hollow organs)

16. **abdominal (abdomin/al)**
 - pertaining to the abdomen
17. **proctoptosis (proct/o/ptosis)**
 - condition of prolapse of the rectum
18. **diverticulitis (diverticul/itis)**
 - inflammation of the diverticulum
19. **oral (or/al)**
 - pertaining to the mouth
20. **appendectomy (append/ectomy)**
 - excision of the appendix
21. **esophagoscopy (esophag/o/scopy)**
 - process of viewing the esophagus
22. **cheilorrhaphy (cheil/o/rrhaphy)**
 - suturing of the lip
23. **glossorrhaphy (gloss/o/rrhaphy)**
 - suturing of the tongue
24. **pyloromyotomy (pylor/o/my/o/tomy)**
 - incision into the pyloric muscle
25. **gastroplasty (gastr/o/plasty)**
 - surgical repair of the stomach
26. **colectomy (col/ectomy)**
 - excision of the colon
27. **sigmoidoscopy (sigmoid/o/scopy)**
 - process of viewing the sigmoid colon
28. **palatitis (palat/itis)**
 - inflammation of the palate
29. **esophageal (esophag/eal)**
 - pertaining to the esophagus
30. **colitis (col/itis)**

- inflammation of the colon
- 31. **ileocecal (ile/o/cec/al)**
 - pertaining to the ileum and cecum
- 32. **gastrectomy (gastr/ectomy)**
 - excision of the stomach
- 33. **anoplasty (an/o/plasty)**
 - surgical repair of the anus
- 34. **cholelithiasis (chole/lith/iasis)**
 - condition of gallstones
- 35. **gastroscopy (gastr/o/scopy)**
 - process of viewing the stomach
- 36. **colostomy (col/o/stomy)**
 - creation of an artificial opening in the colon
- 37. **polyposis (polyp/osis)**
 - abnormal condition of (multiple) polyps
- 38. **laparoscopy (lapar/o/scopy)**
 - process of viewing the abdominal cavity
- 39. **cholecystectomy (chole/cyst/ectomy)**
 - excision of the gallbladder to remove stones
- 40. **glossitis (gloss/itis)**
 - inflammation of the tongue
- 41. **cholangioma (cholangi/oma)**
 - tumour of the bile duct
- 42. **pancreatic (pancreat/ic)**
 - pertaining to the pancreas
- 43. **stomatitis (stomat/itis)**
 - inflammation of the mouth
- 44. **ileocecal (ile/o/cec/al)**
 - pertaining to the ileum and cecum

45. **nasogastric (nas/o/gastr/ic)**
 - pertaining to the nose and stomach
46. **proctoscopy (proct/o/scopy)**
 - process of viewing the rectum
47. **herniorrhaphy (herni/o/rrhaphy)**
 - suturing of a hernia
48. **appendicitis (appendic/itis)**
 - inflammation of the appendix
49. **gingivectomy (gingiv/ectomy)**
 - excision of the gums
50. **gastroenterocolitis (gastr/o/enter/o/col/itis)**
 - inflammation of the stomach, intestines, and colon
51. **choledocholithotomy (choledoch/o/lith/o/tomy)**
 - incision into the common bile duct to remove stones
52. **gastroscope (gastr/o/scope)**
 - instrument used to view the stomach
53. **diverticulosis (diverticul/osis)**
 - abnormal condition of having diverticula
54. **uvulitis (uvul/itis)**
 - inflammation of the uvula
55. **dysphagia (dys/phagia)**
 - difficult swallowing
56. **gastrostomy (gastr/o/stomy)**
 - creation of an artificial opening in the stomach
57. **hemicolectomy (hemi/col/ectomy)**
 - excision of half of the colon
58. **choledocholithiasis (choledoch/o/lith/iasis)**
 - condition of stones in the common bile duct
59. **uvulectomy (uvul/ectomy)**

- excision of the uvula
- 60. **peritoneal (periton/eal)**
 - pertaining to the peritoneum
- 61. **ileostomy (ile/o/stomy)**
 - creation of an artificial opening in the ileum
- 62. **steatorrhea (steat/o/rrhea)**
 - discharge of fat
- 63. **sialolith (sial/o/lith)**
 - stone in the salivary gland
- 64. **proctology (proct/o/logy)**
 - study of disease and disorders of the rectum
- 65. **gastrojejunostomy (gastr/o/jejun/o/stomy)**
 - creation of an artificial opening between the stomach and the jejunum
- 66. **rectal (rect/al)**
 - pertaining to the rectum
- 67. **gingivitis (gingiv/itis)**
 - inflammation of the gums
- 68. **colonoscopy (colon/o/scopy)**
 - process of viewing the colon
- 69. **colorectal (col/o/rect/al)**
 - pertaining to the colon and rectum
- 70. **anal (an/al)**
 - pertaining to the anus
- 71. **duodenal (duoden/al)**
 - pertaining to the duodenum
- 72. **abdominocentesis (abdomin/o/centesis)**
 - surgical puncture to aspirate fluid from the abdomen
- 73. **hepatitis (hepat/itis)**
 - inflammation of the liver

74. **laparoscope (lapar/o/scope)**
 - instrument used to view the abdominal cavity
75. **antrectomy (antr/ectomy)**
 - excision of the antrum (of the stomach)
76. **enterorrhaphy (enter/o/rrhaphy)**
 - suturing of the intestine
77. **esophagitis (esophag/itis)**
 - inflammation of the esophagus
78. **uvulopalatopharyngoplasty (UPPP)**
 - uvul/o/palat/o/pharyng/o/plasty
 - surgical repair of the uvula, palate, and pharynx
79. **peritonitis (periton/itis)**
 - inflammation of the peritoneum
80. **diverticulectomy (diverticul/ectomy)**
 - excision of the diverticula
81. **enteropathy (enter/o/pathy)**
 - disease of the intestines
82. **proctologist (proct/o/logist)**
 - Specialist who studies and treats diseases of the rectum
83. **gastritis (gastr/itis)**
 - inflammation of the stomach
84. **abdominoplasty (abdomin/o/plasty)**
 - surgical repair of the abdomen
85. **celiotomy (celi/o/tomy)**
 - incision into the abdominal cavity
86. **gastroenteritis (gastr/o/enter/itis)**
 - inflammation of the stomach and intestines
87. **endoscopy (endo/scopy)**
 - process of viewing within (hollow organs)

88. **palatoplasty (palat/o/plasty)**
 - surgical repair of the palate
89. **laparotomy (lapar/o/tomy)**
 - incision into the abdominal cavity
90. **colonoscope (colon/o/scope)**
 - instrument used to view the colon
91. **polypectomy (polyp/ectomy)**
 - excision of polyps
92. **gastrojejunostomy (gastr/o/jejun/o/stomy)**
 - creation of an artificial opening between the stomach and the jejunum
93. **CT colonography (CT colon/o/graphy)**
 - radiographic imaging of the colon using computed tomography
94. **esophagogastroduodenoscopy (EGD)**
 - esophag/o/gastr/o/duoden/o/scopy
 - process of viewing the esophagus, stomach and duodenum
95. **stomatogastric (stomat/o/gastr/ic)**
 - pertaining to the mouth and stomach
96. **celiac (celi/ac)**
 - pertaining to the abdomen
97. **gastromalacia (gastr/o/malacia)**
 - softening of the stomach
98. **dyspepsia (dys/pepsia)**
 - difficult digestion
99. **esophagogastroplasty (esophag/o/gastr/o/plasty)**
 - surgical repair of the esophagus and stomach
100. **sublingual (sub/lingu/al)**
 - pertaining to under the tongue
101. **steatohepatitis (steat/o/hepat/itis)**
 - inflammation of liver associated with fat

Activity source: Digestive System Medical Terms by Kimberlee Carter, from Building a Medical Terminology Foundation by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Digestive System Medical Terms

Digestive System terms (Text Version)

Practice the following **digestive system** medical terms that are not easily broken into word parts.

1. **ascites**
 - abnormal intraperitoneal accumulation of fluid with large number of proteins and electrolytes
2. **hemorrhoids**
 - distended and swollen veins in the rectum and anus
3. **nausea**
 - urge to vomit
4. **stoma**
 - surgical opening between an organ and the surface of the body
5. **adhesion**
 - band of scar tissue that binds anatomic surfaces to each other
6. **emesis**
 - vomiting
7. **cirrhosis**
 - chronic degenerative disease of the liver
8. **polyp**
 - small tumour-like growth that extends from the surface of a mucous membrane
9. **feces**
 - stool, fecal matter
10. **obesity**
 - abnormal increase in the proportion of fat cells resulting in excess body weight for height

11. **dysentery**

- inflammation of the intestine presenting with abdominal pain and bloody diarrhea

12. **melena**

- black tarry stool that contains blood from the GI tract

13. **flatus**

- gas in the GI tract

14. **reflux**

- abnormal backward flow

15. **palpate**

- physical examination technique: The examiner feels for texture, size, consistency, and location of body parts with hands.

Activity source: Digestive System terms not easily broken down into word parts by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY-4.0. /Text version added.

Pronouncing and Defining Commonly Abbreviated Digestive System Terms

Practice pronouncing and defining these commonly abbreviated digestive system terms:

- APR (abdominoperineal resection)
- BE (barium enema)
- EGD (esophagogastroduodenoscopy)
- ERCP (endoscopic retrograde cholangiopancreatography)
- EUS (endoscopic ultrasound)
- FOBT (fecal occult blood test)
- GERD (gastroesophageal reflux disease)
- GI (gastrointestinal)
- H.pylori (Helicobacter pylori)
- IBS (irritable bowel syndrome)
- N&V (nausea and vomiting)
- PEG (percutaneous endoscopic gastrostomy)
- UC (ulcerative colitis)

- UGI (upper gastrointestinal)
- UPPP (uvulopalatopharyngoplasty)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

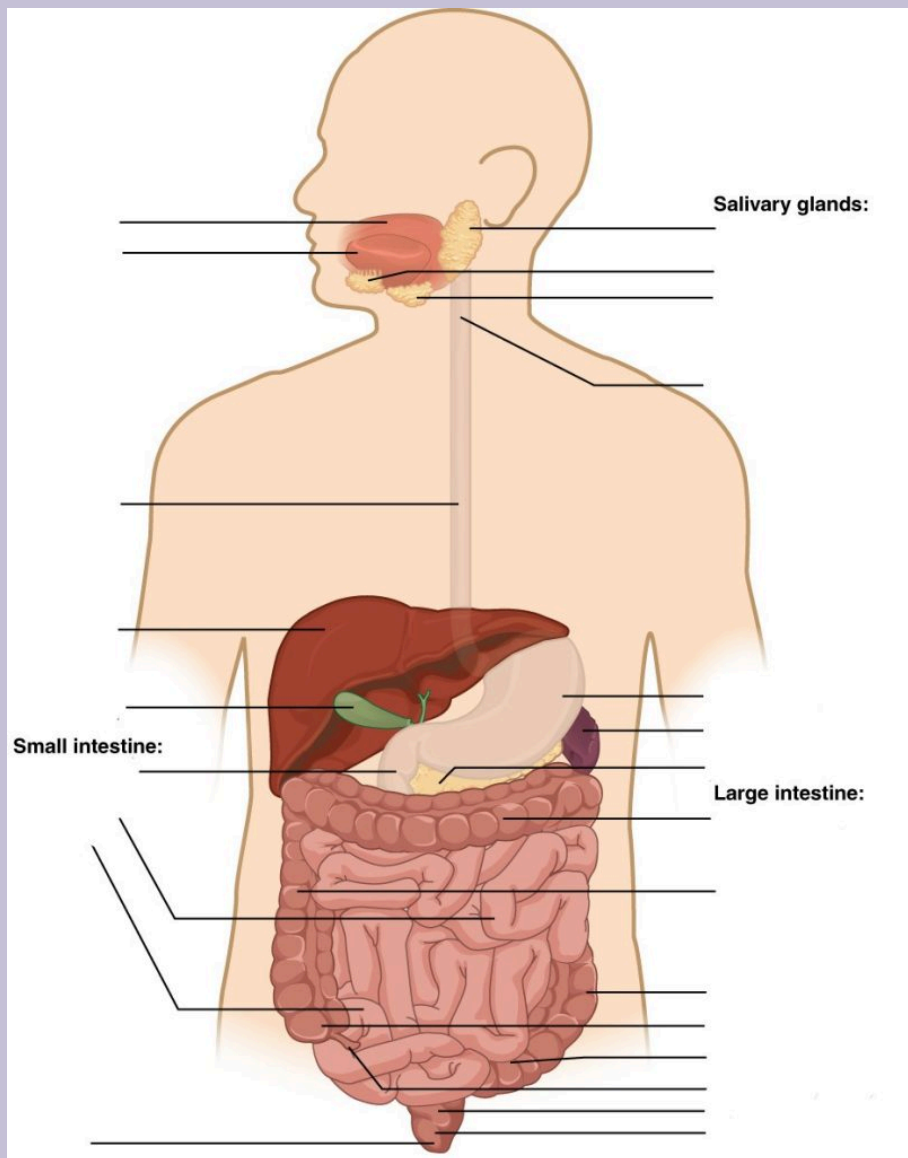
Digestive System Structures

Label the following digestive system anatomy:

Digestive System Anatomy (Text Version)

Label the diagram with correct words listed below:

- | | | |
|------------------------|----------------------|----------------------|
| 1. Gallbladder | 9. Anal canal | 17. Sublingual gland |
| 2. Mouth | 10. Parotid gland | 18. Ascending colon |
| 3. Jejunum | 11. Descending colon | 19. Cecum |
| 4. Tongue | 12. Duodenum | 20. Stomach |
| 5. Ileum | 13. Esophagus | 21. Spleen |
| 6. Sigmoid colon | 14. Transverse colon | 22. Rectum |
| 7. Liver | 15. Pharynx | 23. Appendix |
| 8. Submandibular gland | 16. Anus | 24. Pancreas |



Digestive System Anatomy Diagram (Text Version)

This diagram shows an anterior view of the head and torso of the human body with the anatomical organs and structures comprising the digestive system identified. From the top working clockwise. Located in the mouth or oral cavity are three glands which secrete saliva containing enzymes to aid in digestion these include: _____[Blank 1], _____[Blank 2], and the _____[Blank 3]. When the ingested food is ready to leave the mouth, it is transferred to the throat to swallow, the throat is also known as the _____[Blank 4]. The _____[Blank 5] is a muscular hollow organ which aids in the digestive process by breaking down food for digestion. While the _____[Blank 6] located under the left portion of the diaphragm, helps to filter blood. The _____[Blank 7] is an accessory organ responsible for producing a hormone known as insulin and insulin is critical in the metabolism of sugars. The large intestines have many structural components _____[Blank 8], _____[Blank 9], _____[Blank 10], _____[Blank 11], and _____[Blank 12] with these structures responsible for the final stage of digestion known as elimination. A small finger-like projections hangs from the cecum known as the _____[Blank 13] and this structure has a role in the development of the immune system in early human development. As a continuation of the sigmoid

colon a hollow structure known as the _____[Blank 14] is identified. Next, is the final segment of the digestive system and is a structure measuring about 3 to 4 cm long known as the _____[Blank 15]. Fecal matter is expelled through the terminal opening in the digestive system called the _____[Blank 16]. The small intestines divided into three distinct parts; the is the third part _____[Blank 17], the _____[Blank 18] is the second part, and the _____[Blank 19] is the first part. The _____[Blank 20] is an accessory organ of digestion and is responsible for storing bile for when it is needed to breakdown fats in the process of digestion. The _____[Blank 21] located in the upper right side of the abdomen is responsible for producing the bile to send to the gallbladder for storage until it the bile is released. The _____[Blank 22] connects the pharynx to the stomach it is responsible for gently moving the food from the pharynx to the stomach. The _____[Blank 23] located in the mouth is responsible for moving the food around in the mouth during the chewing or mastication process. The _____[Blank 24] also known as the oral cavity contains the saliva glands, the teeth and tongue and begins the process of digestion.

Check your answers¹

Activity source: Digestive System Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Digestive System(Text version)

Fill in the blanks using the following list of words:

- polyp
- palpate
- obesity
- hemorrhoids
- emesis
- melena
- flatus
- ascites
- feces
- reflux
- nausea
- cirrhosis
- dysentery
- adhesion
- stoma

The Physician during an examination will _____[Blank 1] to feel for texture, size, consistency and location of body parts with hands.

A _____[Blank 2] is a small tumour-like growth that extend from the surface of a mucous membrane.

_____ [Blank 3] is an abnormal increase in the proportion of fat cells resulting in excess body weight for height.

Distended and swollen veins in the rectum and anus are called _____[Blank 4].

The medical term for vomiting is _____[Blank 5].

_____ [Blank 6] is black tarry stool that contains blood from the gastrointestinal tract.

_____ [Blank 7] is the medical term for gas in the gastrointestinal tract.

Abnormal intraperitoneal accumulation of fluid with large amount of proteins and electrolytes is _____[Blank 8].

_____ is fecal matter.

Abnormal backward flow is called _____[Blank 10].

The urge to vomit is _____[Blank 11].

_____ [Blank 12] is a chronic degenerative disease of the liver due to alcohol abuse.

_____ [Blank 13] is an inflammation of the intestine presenting with abdominal pain and bloody diarrhea.

A band of scar tissue that binds anatomic surfaces to each other is called an _____[Blank 14].

The surgical opening between an organ and the surface of the body is called a _____[Blank 15].

Check your answers: ²

Activity source: Digestive System by Alyssa Arsenault, licensed under CC BY- 4.0 from “Digestive System” in Building a Medical Terminology Foundation by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Converted to Text.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Digestive System – Consultation Report (Text version)

Use the words below to fill in the consultation report:

- | | | |
|-----------------|--------------------|----------|
| 1. diarrhea | 5. resists walking | 9. eyes |
| 2. treatment | 6. session | 10. gait |
| 3. electrolytes | 7. vomiting | |
| 4. Glucose | 8. stools | |

PATIENT NAME: Alex WEBB

AGE: 30

DOB: November 10

SEX: Male

CONSULTANT: Louis D. Wainwright, MD, Gastroenterology

REQUESTING PHYSICIAN: Trevor Sharpe, MD, Family Medicine

REASON FOR CONSULTATION: Please evaluate GI distress.

I was asked to see this 30-year old male in consultation because of unremitting nausea, _____[Blank 1], _____[Blank 2], abdominal pain, dizziness, and low-grade fever. The patient has a poor appetite but reports no weight loss. He has noted some postprandial cramping, midepigastic pain, and unremitting diarrhea but no blood in the _____[Blank 3]. He states he is “healthier,” but he still has some dizziness.

Initial treatment consisted of IV fluids and control of _____[Blank 4]. Thereafter, the patient was progressed to clear fluids and soft diet. He has done well on this routine; however, his dizziness has persisted. Fever has resolved.

On admission, the patient's lab data revealed CBC with hematocrit of 142, hemoglobin 25 with differential of neutrophils 51%, bands 8%, lymphocytes 26%, monocytes 6%, basophils none. Serum electrolytes were normal. Potassium was low at 3.5, BUN: creatinine ratio was normal. _____[Blank 5] was within normal range. Stool studies were within normal.

On examination, I find the patient to be lethargic and uncomfortable with mild nausea and dizziness. He prefers to keep his eyes closed. On examination of the _____[Blank 6], I find no nystagmus. There is pallor to the skin, and he seems cool to the touch. Upon standing by the bedside, the patient is unsteady. Although he _____[Blank 7], when he attempts to walk, his _____[Blank 8] is halting, and he tends to fall to the left side. Abdomen is flat and nontender. Bowel sounds are WNL. Rectal exam deferred.

RECOMMENDATIONS: I think we should continue essential _____[Blank 9] of this gentleman. Because of the symptoms of dizziness on admission, we may want to consider a CT scan to rule out an intracerebral bleed or subdural hematoma. My opinion at this time is that we are dealing with a resolving _____[Blank 10] of gastritis.

Thank you for asking me to see this patient. I will be glad to follow him with you throughout his hospital stay.

Louis D. Wainwright, MD, Gastroenterology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

Activity source: Digestive System – Consultation Report by Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Digestive System – Operative Report (Text version)

Use the words listed below to fill in the operative report:

- esophagitis
- ulceration
- lateral
- stomach
- GE
- sporadic
- retroflexion
- bleeding
- antrum
- duodenum
- lidocaine
- duodenitis

PATIENT NAME: Bruce WEBSTER
AGE: 48
SEX: Male
DOB: September 23
DATE OF ADMISSION: July 2
DATE OF PROCEDURE: July 2
ADMITTING PHYSICIAN: Trevor Sharpe, MD, Family Medicine
SURGEON: Louis D. Wainwright, MD, Gastroenterology
PREOPERATIVE DIAGNOSIS: GI Bleed.
POSTOPERATIVE DIAGNOSES:

1. Severe _____[Blank 1].
2. Gastroesophageal _____[Blank 2].
3. No Significant bleeding seen in the stomach.

OPERATIVE PROCEDURE: Gastrointestinal endoscopy.
ANESTHESIA: _____[Blank 3] 1%.

PROCEDURE: The patient was placed into the left _____[Blank 4] position. A scope was introduced from the mouth, under visualization and advanced to the upper part of the _____[Blank 5], upper part of esophagus, middle of esophagus, _____[Blank 6] junction, and some _____[Blank 7] bleeding was seen at the GE junction. The scope was moved through the upper part of the stomach into the _____[Blank 8]. The _____[Blank 9] showed some inflammation and the scope was then brought out. _____[Blank 10] was not performed. The scope was then brought back slowly. Mild _____[Blank 11] was also seen and a little bit of ulceration noted at GE junction.

CONCLUSION: Severe esophagitis, may be some source of _____[Blank 12] from there, but no active bleeding at this time.

Louis D. Wainwright, MD, Gastroenterology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ⁴

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Test Your Knowledge

Test your knowledge by answering the questions below:

Digestive System Glossary Reinforcement Activity (Text version)

1. _____ [Blank 1] is a band of smooth muscle at the junction between the pylorus of the stomach and the duodenum of the small intestine.
 - a. Ampulla
 - b. Quadrate
 - c. Pyloric sphincter
2. Fatty tissue that stretches over the abdomen, plays a role in immune response and the growth of certain cancers is called _____ [Blank 2].
 - a. Fundus
 - b. Convex
 - c. Omentum
3. The process of breaking down the fat into smaller blood cells which makes it easy for enzymes to function and digest food is called _____ [Blank 3].
 - a. Bicarbonate
 - b. Malabsorption
 - c. Emulsification
4. _____ [Blank 4] is the location where the diaphragm has a small opening through which the esophagus passes before connecting.
 - a. Hiatal
 - b. Lacteals
 - c. Hilum
5. Situated nearer to the center of the body or the point of attachment is the _____ [Blank 5].
 - a. Proximal
 - b. Distal
 - c. Quadrate

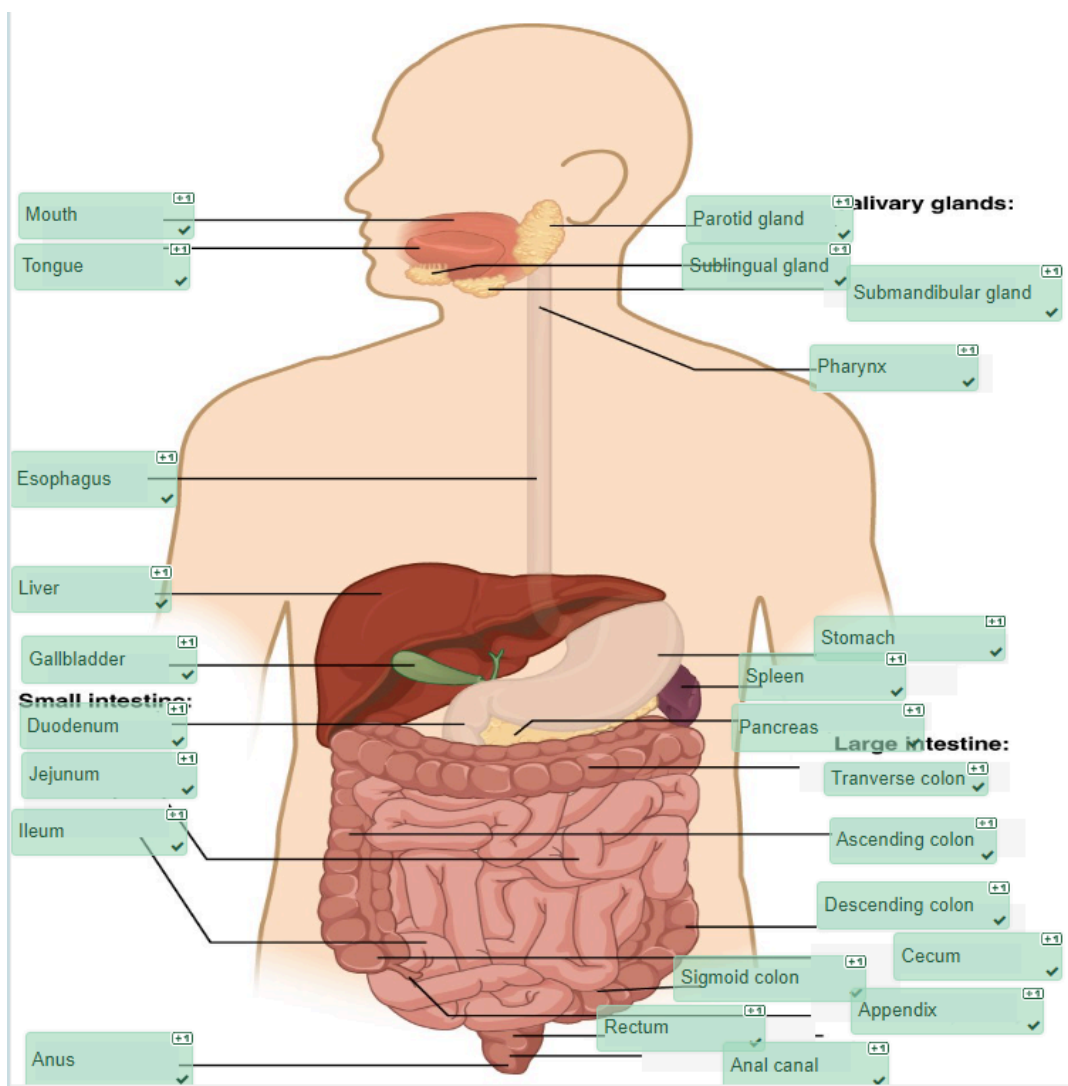
Check your answers: ⁵

Activity source: Digestive System Glossary Reinforcement Activity by Gisele Tuzon, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

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Notes



1.

Check your

answers: Digestive System Anatomy Diagram (Text Version) This diagram shows an anterior view of the head and torso of the human body with the anatomical organs and structures comprising the digestive system identified. From the top working clockwise Located in the mouth or oral cavity are three glands which secrete saliva containing enzymes to aid in digestion these include: **parotid gland**, **sublingual gland**, and the **submandibular gland**. When the ingested food is ready to leave the mouth, it is transferred to the throat to swallow, the throat is also known as the **pharynx**. The **stomach** is a muscular hollow organ which aids in the digestive process by breaking down food for digestion. While the **spleen** located under the left portion of the diaphragm, helps to filter blood. The **pancreas** is an accessory organ responsible for producing a hormone known as insulin and insulin is critical in the

metabolism of sugars. The large intestines have many structural components **transverse colon, ascending colon, descending colon, cecum,** and **sigmoid colon** with these structures responsible for the final stage of digestion known as elimination. A small finger-like projection hangs from the cecum known as the **appendix** and this structure has a role in the development of the immune system in early human development. As a continuation of the sigmoid colon a hollow structure known as the **rectum** is identified. Next, is the final segment of the digestive system and is a structure measuring about 3 to 4 cm long known as the **anal canal**. Fecal matter is expelled through the terminal opening in the digestive system called the **anus**. The small intestines divided into three distinct parts; the is the third part **ileum**, the **jejunum** is the second part, and the **duodenum** is the first part. The **gall bladder** is an accessory organ of digestion and is responsible for storing bile for when it is needed to breakdown fats in the process of digestion. The **liver** located in the upper right side of the abdomen is responsible for producing the bile to send to the gallbladder for storage until it the bile is released. The **esophagus** connects the pharynx to the stomach it is responsible for gently moving the food from the pharynx to the stomach. The **tongue** located in the mouth is responsible for moving the food around in the mouth during the chewing or mastication process. The **mouth** also known as the oral cavity contains the saliva glands, the teeth and tongue and begins the process of digestion.

2. 1. palpate, 2. polyp, 3. obesity, 4. hemorrhoids, 5. emesis, 6. melena, 7. flatus, 8.ascites, 9. feces, 10. reflux, 11. nausea, 12. cirrhosis, 13. dysentery, 14. adhesion, 15. stoma
3. 1.diarrhea, 2.vomiting, 3.stools, 4. electrolytes, 5.Glucose, 6.eyes, 7.resists walking, 8.gail 9.treatment, 10.session
4. 1. esophagitis, 2.ulceration, 3. lidocaine, 4.lateral, 5.stomach, 6.GE, 7.sporadic, 8.antrum, 9.duodenum, 10.reflexion, 11.duodenitis, 12.bleeding
5. 1. Pyloric sphincter, 2. Omentum, 3. Emulsification, 4. Hiatal, 5. Proximal,

CHAPTER 13: SKELETAL SYSTEM

Skeletal System

If you would like to review the textbook chapter content, please visit [Chapter 13: Skeletal System \[New Tab\]](#).

Learning Objectives

- Identify the anatomy of the skeletal system and describe the main functions of the skeletal system
- Analyze, translate, and define medical terms and common abbreviations of the skeletal system
- Practice the spelling and pronunciation of skeletal system terminology
- Identify the medical specialties associated with the skeletal system and explore common diseases, disorders, and procedures

Key Word Components

Identify meanings of key word components of the skeletal system:

Prefixes

- a- (absence of, without)
- ab- (away from)
- ad- (towards)
- brady- (slow)
- dys- (painful, difficult, abnormal, labored)
- hyper- (above, excessive)
- inter- (between)
- intra- (within, in)
- poly- (many, much)

- sub- (below, under)
- supra- (above)
- sym- (together, joined)
- syn- (together, joined)

Combining Forms

- anky/o (stiff, bent)
- aponeur/o (aponeurosis)
- arthr/o (joint)
- burs/o (bursa)
- carp/o (carpals, wrist)
- chondr/o (cartilage)
- clavic/o (clavicle, collarbone)
- clavicul/o (clavicle, collarbone)
- cost/o (ribs)
- crani/o (cranium)
- disk/o (intervertebral disk)
- femor/o (femur, upper leg bone)
- fibul/o (fibula, lower leg bone)
- humer/o (humerus, upper arm bone)
- ili/o (ilium)
- ischi/o (ischium)
- kinesi/o (movement, motion)
- kyph/o (increased convexity of the spine)
- lord/o (bent forward, increased concavity of the spine)
- lumb/o (loin, lumbar region of the spine)
- mandibul/o (mandible, lower jaw bone)
- maxill/o (maxilla, upper jaw bone)
- menisc/o (meniscus, crescent)
- myel/o (marrow [bone], spinal cord)
- oste/o (bone)
- patell/o (patella, kneecap)
- pelv/i (pelvis, pelvic bone)
- pelv/o (pelvis, pelvic bone)
- petr/o (stone)
- phalang/o (phalanges, bones of finger and toes)
- pub/o (pubis)
- rachi/o (vertebral spine, vertebral column)
- radi/o (nerve root)
- scapul/o (scapula, shoulder blade)
- scoli/o (crooked, curved)
- spondyl/o (vertebra, spine, vertebral column)

- stern/o (sternum, breast bone)
- tars/o (tarsals, ankle bones)
- ten/o (tendon)
- tendin/o (tendon)
- tend/o (tendon)
- tibi/o (tibia, lower leg bone)
- uln/o (ulna, lower arm bone)
- vertebr/o (vertebra, spine, vertebral column)

Suffixes

- -al (pertaining to)
- -algia (pain)
- -ar (pertaining to)
- -asthenia (weakness)
- -centesis (surgical puncture to aspirate fluid)
- -clasia (break)
- -clasis (break)
- -clast (break)
- -desis (surgical fixation, fusion)
- -ectomy (excision, surgical removal, cutting out)
- -gram (the record, radiographic image)
- -graphy (process of recording, radiographic imaging)
- -ic (pertaining to)
- -itis (inflammation)
- -lysis (loosening, separating, dissolution)
- -malacia (softening)
- -oid (resembling)
- -oma (tumor)
- -osis (abnormal condition)
- -penia (abnormal reduction)
- -physis (growth)
- -plasty (surgical repair)
- -rrhaphy (suturing, repairing)
- -sarcoma (malignant tumour)
- -schisis (split, fissure)
- -scopy (process of viewing, visual examination)
- -tomy (incision, cut into)
- -trophy (nourishment, development)

Skeletal System Words

Skeletal System Medical Terms (Text Version)

Practice the following **skeletal system** words by breaking into word parts and pronouncing.

1. **ulnoradial**

- uln/o/radi/al
- pertaining to the ulna and radius

2. **tarsectomy**

- tars/ectomy
- excision of the tarsal

3. **osteocyte**

- oste/o/cyte
- bone cell

4. **cranioschisis**

- crani/o/schisis
- fissure of the cranium

5. **carpectomy**

- carp/ectomy
- excision of a carpal (wrist)

6. **chondroplasty**

- chondr/o/plasty
- surgical repair of cartilage

7. **cranioplasty**

- crani/o/plasty
- surgical repair of the cranium

8. **pelvisacral**

- pelv/i/sacr/al
- pertaining to the pelvis and sacrum

9. **subscapular**

- sub/scapul/ar

- pertaining to below the scapula

10. **tenosynovitis**

- ten/o/synov/itis
- inflammation of the tendon and synovial membrane

11. **sarcopenia**

- arc/o/penia
- abnormal reduction of connective tissue presenting as skeletal muscle mass loss and loss of strength

12. **tibial**

- tibi/al
- pertaining to the tibia

13. **discitis**

- disc/itis
- Inflammation of the intervertebral disk

14. **phalangectomy**

- phalang/ectomy
- excision of the phalanges

15. **sternoclavicular**

- stern/o/clavicul/ar
- pertaining to sternum and clavicle

16. **humeral**

- humer/al
- pertaining to the humerus

17. **arthralgia**

- arthr/algia
- painful joint

18. **lumbosacral**

- lumb/o/sacr/al
- pertaining to the lumbar region of the spine and sacrum

19. **hyperkinesia**

- hyper/kines/ia
- condition of excessive movement

20. **radial**

- radi/al
 - pertaining to radius
21. **vertebroplasty**
- vertebr/o/plasty
 - surgical repair of the vertebral column
22. **arthrodesis**
- arthr/o/desis
 - surgical fixation of a joint
23. **rachischisis**
- rach/ischisis
 - fissure of vertebral column
24. **pubic**
- pub/ic
 - pertaining to pubis
25. **intercostal**
- inter/cost/al
 - pertaining to between the ribs
26. **osteopetrosis**
- oste/o/petr/osis
 - abnormal condition of stone-like bones
27. **ankylosis**
- ankyl/osis
 - abnormal condition of stiffness
28. **sternoid**
- stern/oid
 - resembling the sternum
29. **chondrectomy**
- chondr/ectomy
 - excision of cartilage
30. **osteonecrosis**
- oste/o/necr/osis
 - abnormal condition of bone death (lack of blood supply)
31. **synovial sarcoma**

- synovi/al sarcoma
- malignant tumor pertaining to the synovial membrane

32. **dystrophy**

- dys/trophy
- abnormal development

33. **synovectomy**

- synov/ectomy
- excision of the synovial membrane

34. **osteopenia**

- oste/o/penia
- abnormal reduction of bone mass

35. **kyphosis**

- kyph/osis
- abnormal condition of convexity of the spine

36. **osteitis**

- oste/itis
- inflammation of bone

37. **hypertrophy**

- hyper/trophy
- excessive development

38. **spondylosis**

- spondyl/osis
abnormal condition of the vertebrae

39. **spondylarthritis**

- spondyl/arthr/itis
- inflammation of the vertebra and joint

40. **cranial**

- crani/al
- pertaining to the cranium

41. **osteoclasia**

- oste/o/clasia
surgical breaking of a bone

42. **costochondral**

- cost/o/chondr/al
- pertaining to ribs and cartilage

43. **arthroscopy**

- arthr/o/scopy
- process of viewing a joint

44. **pelvic**

- pelv/ic
- pertaining to pelvis, pelvic bone

45. **lumbar**

- lumb/ar
- pertaining to the lumbar region of the spine

46. **osteomyelitis**

- oste/o/myel/itis
- inflammation of bone and bone marrow

47. **osteoblast**

- oste/o/blast
- developing bone cell

48. **tenorrhaphy**

- ten/o/rrhaphy
- suturing of a tendon

49. **clavicular**

- clavicul/ar
- pertaining to the clavicle

50. **rachiotomy**

- rachi/o/tomy
- incision into the vertebral column

51. **intracranial**

- intra/crani/al
- pertaining to within the cranium

52. **tendinitis**

- tendin/itis
- inflammation of the tendon

53. **costectomy**

- cost/ectomy
- excision of rib(s)

54. **vertebrocostal**

- vertebr/o/cost/al
- pertaining to vertebrae and ribs

55. **bursectomy**

- burs/ectomy
- excision of bursa

56. **laminectomy**

- lamin/ectomy
- excision of the lamina

57. **craniotomy**

- crani/o/tomy
- incision into the cranium

58. **pubofemoral**

- pub/o/femor/al
- pertaining to pubic bone and femur

59. **submandibular**

- sub/mandibul/ar
- pertaining to under the mandible

60. **patellectomy**

- patell/ectomy
- excision of the kneecap

61. **lumbocostal**

- lumb/o/cost/al
- pertaining to the lumbar region of the spine and ribs

62. **intervertebral**

- inter/vertebr/al
- pertaining to between the vertebrae

63. **femoral**

- femor/al
- pertaining to the femur

64. **lordosis**

- lord/osis
- abnormal condition of increased concavity of the spine (bent forward)

65. **arthroplasty**

- arthr/o/plasty
- surgical repair of a joint

66. **iliofemoral**

- ili/o/femor/al
- pertaining to the ilium and femur

67. **bursitis**

- burs/itis
- inflammation of the bursa

68. **arthrography**

- arthr/o/graphy
- process of recording a joint

69. **subcostal**

- sub/cost/al
- pertaining to below the ribs

70. **sternoclavicular**

- stern/o/clavicul/ar
- pertaining to the sternum and clavicle

71. **dyskinesia**

- dys/kines/ia
- condition of difficult movement

72. **bradykinesia**

- brady/kines/ia
- condition of slow movement

73. **sacral**

- sacr/al
- pertaining to the sacrum

74. **arthritis**

- arthr/itis
- inflammation of a joint

75. **discectomy**

- disk/ectomy
- excision of the intervertebral disk

76. **maxillitis**

- maxill/itis
- inflammation of the maxilla

77. **suprapatellar**

- supra/patell/ar
- pertaining to above the knee cap

78. **ischiofibular**

- ischi/o/fibul/ar
- pertaining to the ischium and fibula

79. **tenomyoplasty**

- ten/o/my/o/plasty
- surgical repair of the tendon and muscle

80. **arthrocentesis**

- arthr/o/centesis
- surgical puncture to aspirate fluid from a joint

81. **osteosarcoma**

- oste/o/sarcoma
- malignant tumour of bone

82. **osteochondritis**

- oste/o/chondr/itis
- inflammation of bone and cartilage

83. **ostectomy**

- ost/ectomy
- excision of bone

84. **osteoarthritis**

- oste/o/arthritis
- inflammation of the bone and joint

85. **carpal**

- carp/al
- pertaining to carpal (wrist)

86. **chondromalacia**

- chondr/o/malacia
- softening of cartilage

87. **submaxillary**

- sub/maxill/ary
- pertaining to under the maxilla

88. **arthroclasia**

- arthr/o/clasia
- surgical breaking of a joint

89. **meniscitis**

- menisc/itis
- inflammation of the meniscus

90. **meniscectomy**

- menisc/ectomy
- excision of the meniscus

91. **maxillectomy**

- maxill/ectomy
- excision of the maxilla

92. **substernal**

- sub/stern/al
- pertaining to below the sternum

93. **osteomalacia**

- oste/o/malacia
- softening of bone

94. **scoliosis**

- scoli/osis
- abnormal condition of (lateral) curved spine

95. **ulnoradial**

- uln/o/radi/al
- pertaining to the ulna and nerve root

Activity source: Skeletal System Medical Terms by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Skeletal System Medical Terms

Musculoskeletal System Body Movements (Text Version)

Practice the following endocrine system words by breaking into word parts and pronouncing.

1. **adduction**

- moving toward the midline

2. **rotation**

- turn around on own axis

3. **extension**

- increased angle between bone and joint by placing a limb in a straight position

4. **abduction**

- moving away from the midline

5. **inversion**

- turning inward

6. **supination**

- turn the palm up

7. **eversion**

- turning outward

8. **pronation**

- turn the palm down

9. **flexion**

- decreasing the angle of a joint by bending a limb

Activity source: Musculoskeletal System Body Movements by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

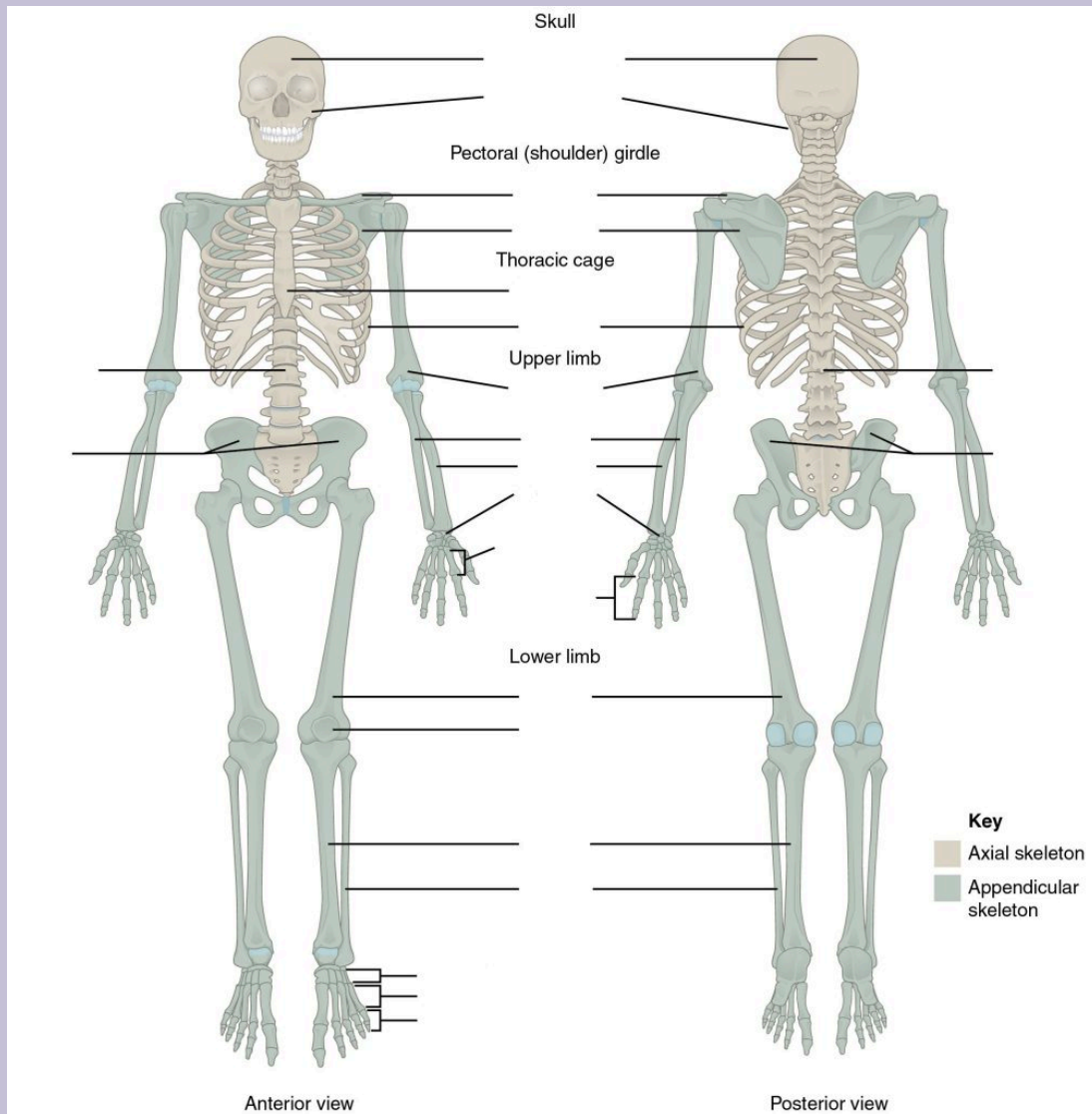
Skeletal System Structures

Label the following skeletal system anatomy:

Musculoskeletal System-Skeleton Anatomy (Text Version)

Label the diagram with the correct words listed below:

- | | | |
|---------------------|---------------------|-----------------|
| 1. Fibula | 9. Vertebral column | 17. Scapula |
| 2. Clavicle | 10. Tibia | 18. Metatarsals |
| 3. Femur | 11. Ulna | 19. Sternum |
| 4. Cranial portion | 12. Phalanges | 20. Metacarpals |
| 5. Radius | 13. Ribs | 21. Patella |
| 6. Facial portion | 14. Tarsals | 22. Humerus |
| 7. Vertebral column | 15. Phalanges | 23. Carpals |
| 8. Pelvic girdle | 16. Pelvic girdle | |



Check your answers¹

Activity source: Musculoskeletal System-Skeleton Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Musculoskeletal System – OPERATIVE REPORT (Text version)

Using the words below fill in the operative report:

- chondromalacia
- x-rays
- arthritis
- Orthopedic
- arthroscopy
- total hip arthroplasty
- femoral
- tendinitis

PATIENT NAME: Mrs. Karen SMITH

AGE: 72 Sex: Female

DATE OF SURGERY: February 24

PREOPERATIVE DIAGNOSIS: Degenerative arthritis of both hips; more severe on the right side.

POSTOPERATIVE DIAGNOSIS: Severe degenerative arthritis and severe _____[Blank 1] of the right hip.

NAME OF PROCEDURE: Total hip arthroplasty.

HISTORY: Mrs. Karen Smith is a 72-year-old widow who has been living alone and independently since her husband's premature death 15 years ago. Mrs. Smith has worked for 30 years at the production line in a factory and is now retired.

Mrs. Smith has been experiencing discomfort in her hips, especially the right one, over the parts twenty years or so. However, what started as a mild discomfort over time turned into severe pain. Now the pain is so bad that she is afraid that it might soon rob her of her independence. She first sought help for her hip pain many years ago. After physical examination, her family physician ordered _____[Blank 2] for both hip joints. Based on the results, it was concluded that the pain was due to severe _____[Blank 3] mainly due to wear and tear. She was advised to lose weight and to take over-the-counter painkillers as needed. She was also referred to a physiotherapist. However, despite the fact that she has lost 10% of her original body weight of 170 pounds and has been adhering to the exercise regimen recommended by her physiotherapist, the pain has grown worse over the years and now is almost unbearable. She was last visited by an orthopedic surgeon and subsequently was admitted to the General Hospital Outpatient _____[Blank 4] Clinic for _____[Blank 5] of both hips.

OPERATIVE REPORT: The patient was brought to the operating room by anesthesia personnel. She was placed on the operating table. A Foley catheter was inserted. The patient was then placed into the lateral decubitus position with her right side up. The right lower extremity was prepped and draped in standard fashion for a _____[Blank 6]. Dissection was carried sharply down through the soft tissue to the greater trochanter. The greater trochanter was used as a landmark to orient the remainder of the dissection which was continued posteriorly and proximally to expose the iliofemoral joint.

The acetabulum was reamed. A 50 mm acetabular shell was used. Femur was debrided using a _____[Blank 7] canal curette. The length of the femoral stem was then checked with the canal curette in place. Appropriate femoral stem and head were selected and implanted. Intraoperative radiographs were obtained to ensure proper component position.

The hip was then checked for range of motion. The patient reached 90 degrees of flexion and full extension with no instability. No abnormality was detected in the surrounding soft tissue. There was no indication of _____[Blank 8].

The area was then closed in a layered fashion. The subcutaneous tissues were closed using surgical Vicryl 5-0 sutures. An incisional VAC was placed over the wound as well. Sponge and needle counts were correct at the end of the operation. The patient tolerated the procedure well and was returned to the recovery room in good condition.

Michael Porter, MD, Orthopedic Surgery

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

Activity source: Musculoskeletal System – Operative Report by Saeedah Akram and Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY-4.0. /Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Musculoskeletal System – Operative Report (Text version)

Use the words below to fill in the operative report:

- orthopedic
- supination
- colles
- carpal
- tenomyoplasty
- sterilized
- aligned
- fluoroscopy
- tenorrhaphy
- sutured
- splint
- arthralgia
- akinesia
- atrophy

PATIENT NAME: Liam PALMER

AGE: 22

SEX: Male

DOB: December 4

DATE OF ADMISSION: May 5

DATE OF PROCEDURE: May 5

ATTENDING PHYSICIAN: Michael Porter, MD, Orthopedic Surgery

PREOPERATIVE DIAGNOSIS: Fx of the distal end of radius.

POSTOPERATIVE DIAGNOSIS: Fx of the distal end of radius.

ANESTHESIA: General.

INDICATION: This 22-year-old male had been skating earlier today when he lost his balance and fell. Trying to break the fall with an outstretched arm, he landed on his right arm, breaking his wrist. Mr. Palmer was brought to the _____[Blank 1] clinic in Toronto General Hospital. The wrist has been kept in a neutral position since even a slight movement was painful. The injured area is edematous and any attempt for active or passive flexion, extension, _____[Blank 2], or pronation caused a sharp pain that shoots all the way to the right shoulder. Posterior-Anterior and lateral x-rays of the wrist and forearm confirmed _____[Blank 3] fracture of the distal end of radius with the broken piece displaced posteriorly. The _____[Blank 4] bones were intact. The patient required surgery to fix the broken bone. Although not certain at that point, there was a possibility that the patient also required _____[Blank 5].

PROCEDURE: The surgery was done under general anesthesia. The patient's arm was placed in a proper position to allow for an easy and unobstructed access to the surgical area. The surgical area was _____[Blank 6]. A longitudinal incision was made to access the fracture. The fractured bone was realigned, and a metal plate was used to secure the _____[Blank 7] bone and restore stability. Throughout the surgery _____[Blank 8] was used to ensure proper reduction of the bone. The surrounding muscles, tendons, and ligaments were examined to ensure their integrity. There was no need for tenomyoplasty or _____[Blank 9]. Once the surgery was completed, the surgical incision was _____[Blank 10], the wrist was bandaged, and the arm was placed in a long cast to immobilize the wrist and elbow joints. The patient left the operation room in good and stable condition.

The patient was discharged from the hospital on the following day. He was scheduled for his first follow up visit in 3 weeks. At that time, the cast will be replaced with a removable wrist _____[Blank 11] and the patient will be referred to a physiotherapy clinic. Timely rehabilitation is extremely important in these types of fractures to reduce _____[Blank 12] and prevent from _____[Blank 13] and muscle _____[Blank 14].

Michael Porter, MD, Orthopedic Surgery

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

Activity source: MUSCULOSKELETAL SYSTEM – OPERATIVE REPORT by Saeedha Akram and Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Skeletal System Glossary Reinforcement Activity (Text version)

1. Joints with some movement are called _____[Blank 1].
 - a. Amphiarthrosis
 - b. Diarthrosis
 - c. Synarthrosis
2. The skeleton that consists of all the bones in the upper and lower limbs is called _____[Blank 2].
 - a. Appendicular Skeleton
 - b. Articulations
 - c. Axial Skeleton
3. A condition that lasts a long time with periods of remission and exacerbation is called _____[Blank 3].
 - a. Chronic
 - b. Edema
 - c. Hematopoiesis
4. Forward curvature of the lower lumbar spine is called _____[Blank 4].
 - a. Scoliosis
 - b. Lordosis
 - c. Kyphosis
5. Comminuted fractures are _____[Blank 5].
 - a. bones that are broken but do not protrude the skin
 - b. bones that are broken and crushed into pieces
 - c. bones that are broken and pierce through the skin

Check your answers: ⁴

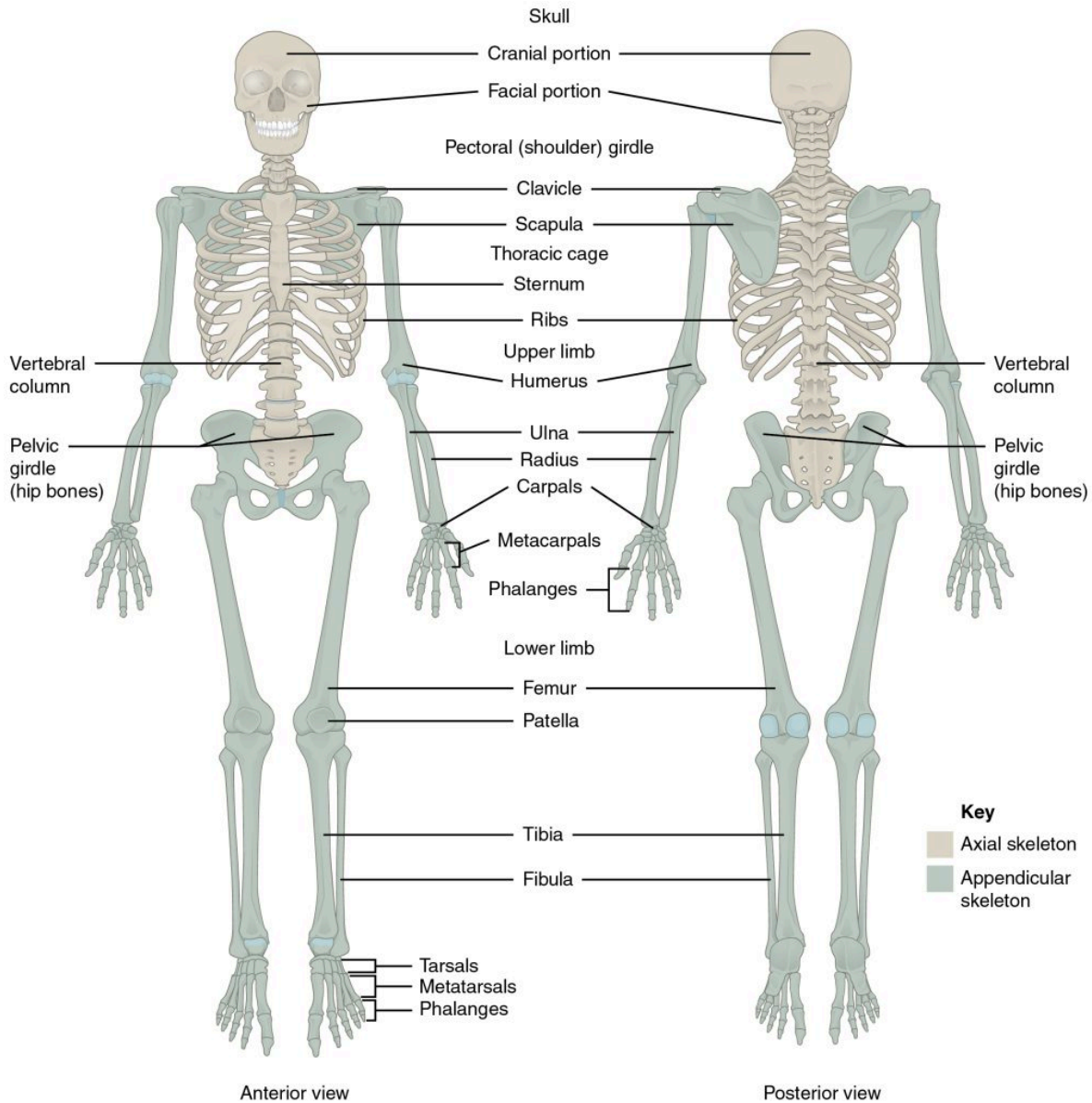
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Notes



- 1.
2. 1.chondromalacia, 2.x-rays, 3.arthritis, 4.Orthopedic, 5.arthroscopy, 6. total hip arthroplasty, 7.femoral, 8.tendinitis
3. 1.orthopedic, 2.supination, 3.Colles, 4.carpal, 5.tenomyoplasty, 5.sterilized, 6.aligned, 7.fluoroscopy, 8.tenorrhaphy, 9.sutured, 10.splint, 11.arthralgia, 12.akinesia, 13.atrophy
4. 1. a) Amphiarthrosis, 2. a) Appendicular Skeleton, 3. a) Chronic, 4. b) Lordosis, 5. b) bones that are broken and crushed into pieces.

CHAPTER 14: MUSCULAR SYSTEM

Muscular System

If you would like to review the textbook chapter content, please visit **Chapter 14: Muscular System** [New Tab].

Learning Objectives

- Identify the anatomy of the muscular system and describe the main functions of the muscular system
- Analyze, translate, and define medical terms and common abbreviations of the muscular system
- Practice the spelling and pronunciation of muscular system terminology
- Identify the medical specialties associated with the muscular system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the muscular system:

Prefixes

- a- (absence of, without)
- ab- (away from)
- ad- (towards)
- dys- (painful, difficult, abnormal, labored)
- hyper- (above, excessive)
- inter- (between)
- intra- (within, in)
- poly- (many, much)
- sub- (below, under)

- supra- (above)
- sym- (together, joined)
- syn- (together, joined)

Combining Forms

- anky/o (stiff or bent)
- fasci/o fascia (forms sheaths enveloping muscles)
- fibr/o (fibrous connective tissue)
- kinesi/o (movement, motion)
- kyph/o (hump)
- lamin/o lamina (thin, flat plate or layer)
- leiomy/o (smooth [viseral] muscle that lines the walls of internal organs)
- my/o (muscle)
- myocardi/o (heart muscle)
- myos/o (muscle)
- plant/o (sole of the foot)
- rhabdomy/o (skeletal [striated] muscle connected to bones)
- sarc/o (flesh, connective tissue)
- ten/o (tendon)
- tendin/o (tendon)
- tend/o (tendon)

Suffixes

- -al (pertaining to)
- -algia (pain)
- -ar (pertaining to)
- -asthenia (weakness)
- -centesis (surgical puncture to aspirate fluid)
- -desis (surgical fixation, fusion)
- -ectomy (excision, surgical removal, cutting out)
- -gram (the record, radiographic image)
- -graphy (process of recording, radiographic imaging)
- -ic (pertaining to)
- -itis (inflammation)
- -lysis (loosening, separating, dissolution)
- -oid (resembling)
- -oma (tumor)
- -osis (abnormal condition)
- -penia (abnormal reduction)

- -physis (growth)
- -plasty (surgical repair)
- -rrhaphy (suturing, repairing)
- -sarcoma (malignant tumor)
- -schisis (split, fissure)
- -scopy (process of viewing, visual examination)
- -tome (instrument used to cut)
- -tomy (incision, cut into)
- -trophy (nourishment, development)

Muscular System Words

Muscular System Medical Terms (Text Version)

Practice the following muscular system words by breaking into word parts and pronouncing.

1. **rhabdomyolysis (rhabd/o/my/o/lysis)**
 - dissolution of a striated muscle
2. **bradykinesia (brady/kines/ia)**
 - condition of slow movement
3. **myorrhaphy (my/o/rrhaphy)**
 - suturing of a muscle
4. **dystrophy (dys/trophy)**
 - abnormal development
5. **tendinitis (tendin/itis)**
 - inflammation of the tendon
6. **electromyogram (electr/o/my/o/gram)**
 - record of the electricity of the muscle
7. **hyperkinesia (hyper/kines/ia)**
 - condition of excessive movement
8. **myasthenia (my/asthenia)**

- weakness of muscles, muscle weakness

9. **hypertrophy (hyper/trophy)**

- excessive development

10. **dyskinesia (dys/kines/ia)**

- condition of difficult movement

11. **tenomyoplasty (ten/o/my/o/plasty)**

- surgical repair of tendon and muscle

12. **myeloma (myel/oma)**

- tumour in the spinal cord

13. **myalgia (my/algia)**

- painful muscles

14. **polymyositis (poly/myos/itis)**

- inflammation of many muscles

15. **tenorrhaphy (ten/o/rrhaphy)**

- suturing of a tendon

16. **fibromyalgia (fibr/o/my/algia)**

- pain in the fibers of muscles

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Pronouncing and Defining Commonly Abbreviated Muscular System Terms

Practice pronouncing and defining these commonly abbreviated muscular system terms:

- ACL (anterior cruciate ligament)
- AROM (active range of motion)
- BKA (below knee amputation)
- BMD (bone mineral density)

- Ca (Calcium)
- CK (creatine kinase)
- CTS (carpal tunnel syndrome)
- DC (Doctor of Chiropractic)
- DEXA or DXA (dual-energy x-ray absorptiometry)
- DO (Doctor of Osteopathy)
- EMG (Electromyogram)
- ESR (erythrocyte sedimentation rate)
- IM (intramuscular)
- MD (Muscular Dystrophy)
- MG (myasthenia gravis)
- NSAID (Nonsteroidal anti-inflammatory drugs, pronounced en-said)
- OA (osteoarthritis)
- Ortho (orthopedics)
- OT (occupational therapist)
- P (pulse)
- PT (physical therapist)
- RA (rheumatoid arthritis)
- ROM (range of motion)
- THR (total hip replacement)
- TKR (total knee replacement)
- TMJ (temporomandibular joint)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Musculoskeletal System – Referral Letter (Text version)

Use the words below to fill in the referral letter:

- CTS
- tingling
- numbness
- osteoarthritis
- clumsiness
- metacarpal
- atrophy
- arthrodesis
- flexion
- tenorrhaphy
- median
- ligament

PATIENT NAME: Mrs. Anna JONES

AGE: 65

SEX: Female

DOB: June 29

REASON FOR REFERRAL: Evaluation and consideration for surgery for treating carpal tunnel syndrome.

Dear Dr. Porter

I am referring Mrs. Jones for evaluation and consideration for surgery for treating _____[Blank 1]. Mrs. Jones is 65 years old. She has moved to this area 2 years ago and I have been her primary care physician since then. Recently she has been complaining of _____[Blank 2], tingling, burning, and pain in her right hand, primarily in the thumb, index, and middle fingers. Occasionally the pain and _____[Blank 3] travel up the forearm toward her shoulder. The patient reports that the pain and unusual sensations have started gradually and worsened over the past couple of years.

The patient has worked as a data entry clerk at a pharmaceutical company for 35 years. Her work involved sitting at her desk and typing on a computer for an average of 7 hours on each workday. She is retired now. The patient reports that during the past few months she has also felt weakness and _____[Blank 4] in her hand, and this has made her everyday life difficult. She can tell that her grip is not as strong as before since she frequently drops things. Now she is finding the simple tasks such as buttoning her clothes, cutting vegetables, and brushing her teeth challenging. The x-ray of the right hand and wrist shows clear signs of _____[Blank 5] and osteoporosis of carpal and _____[Blank 6] bones. On visual examination there is no muscle . The wrist has limited _____[Blank 7] and extension range of motion.

It is important to note that the patient had been in a car accident in her teenage years and had suffered from a compact fracture of her left wrist bones. Multiple surgeries, including arthroplasty and _____[Blank 8], were done to restore the functionality of the left wrist and hand. Eventually, her orthopedic surgeon performed a subtotal _____[Blank 9] of the wrist to provide a stable and pain-free joint with a limited useful range of motion.

Based on the aforementioned observations and findings I have determined that Mrs. Jones is a fit candidate for CTS surgery. A proper cut in the transverse carpal _____[Blank 10] would release the pressure off the _____[Blank 11] nerve and relieve the symptoms.

Thank you for seeing Mrs. Jones. Please do not hesitate to contact me directly with any questions or comments

you may have concerning her care. Also, please keep me updated on her progress and kindly refer her back to my care once her condition resolves.

Trevor Sharpe, MD, Family Medicine

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ¹

Activity source: Musculoskeletal System – Referral Letter by Saeedeh Akram and Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY-4.0. /Text version added.

Test Your Knowledge

Test your knowledge by answering the questions below:

Muscular System Glossary Reinforcement Activity (Text version)

1. Muscle that is associated with the walls of internal organs and is responsible for involuntary muscle movement is called _____. [Blank 1].
 - a. Skeletal muscle
 - b. Smooth muscle
 - c. Cardiac muscle
2. Paralysis that effects one side of the body is called _____. [Blank 2].
 - a. paraplegia
 - b. paresis
 - c. hemiplegia
3. An injury to a joint whereby a ligament is stretched or torn is called _____. [Blank 3].
 - a. a sprain
 - b. a strain
 - c. fibromyalgia

4. Myasthenia Gravis is _____[Blank 4].
 - a. pain in the fibrous tissues of muscles.
 - b. grave or serious muscle weakness.
 - c. partial paralysis wherein there is still some control of the muscles.
5. Skeletal muscle is responsible for _____[Blank 5].
 - a. voluntary muscle movement.
 - b. pumping blood.
 - c. involuntary muscle movement.

Check your answers:²

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Notes

1. 1. CTS, 2. numbness, 3. tingling, 4. clumsiness, 5. osteoarthritis, 6. metacarpal, 7. atrophy, 8. tenorrhaphy, 9. arthrodesis, 10. ligament, 11. median
2. 1. Smooth muscle, 2. hemiplegia, 3. a sprain, 4. grave or serious muscle weakness, 5. voluntary muscle movement

CHAPTER 15: SENSORY SYSTEMS

Sensory Systems

If you would like to review the textbook chapter content, please visit [Chapter 15: Sensory Systems \[New Tab\]](#).

Learning Objectives

- Identify the anatomy of the sensory systems and describe the main functions of the sensory systems
- Analyze, translate, and define medical terms and common abbreviations of the sensory systems
- Practice the spelling and pronunciation of sensory systems terminology
- Identify the medical specialties associated with the sensory systems and explore common diseases, disorders, diagnostic tests and procedures related to the sensory systems

Key Word Components

Identify meanings of key word components of the sensory systems:

Prefixes

- bi- (two)
- bin- (two)
- a- (absence of, without, no, not, negates meaning)
- an- (absence of, without, no, not negates meaning)
- endo- (within, in)

Combining Forms

- acous/o (hearing)
- audi/o (hearing)
- audit/o (hearing)
- aur/o (ear)
- aur/i (ear)
- blephar/o (eyelid)
- cochle/o (cochlea)
- conjunctiv/o (conjunctiva)
- cor/o (pupil)
- corne/o (cornea)
- core/o (pupil)
- cry/o (cold)
- cyst/o (bladder, sac or cyst)
- dacry/o (tear, tear duct)
- dipl/o (two, double)
- ir/o (iris)
- irid/o (iris)
- is/o (equal)
- kerat/o (cornea)
- labyrinth/o (labyrinth, inner ear)
- lacrim/o (tear, tear duct)
- mastoid/o (mastoid bone)
- myring/o (tympanic membrane, eardrum)
- ocul/o (eye)
- ophthalm/o (eye)
- opt/o (vision)
- ossicul/o (ossicle)
- ot/o (ear)
- phac/o (lens)
- phak/o (lens)
- phot/o (light)
- pupil/o (pupil)
- retin/o (retina)
- salping/o (tube)
- scler/o (sclera)
- staped/o (stapes, middle ear)
- ton/o (tension, pressure)
- tympan/o (tympanic membrane, middle ear)
- vestibul/o (vestibule)

Suffixes

- -al (pertaining to)
- -algia (pain)
- -ar (pertaining to)
- -ary (pertaining to)
- -eal (pertaining to)
- -ectomy (excision or surgical removal)
- -gram (record, radiographic image)
- -graphy (process of recording)
- -ia (condition of, diseased or abnormal state)
- -ic (pertaining to)
- -itis (inflammation)
- -logist (specialist or physician who studies and treats)
- -logy (study of)
- -malacia (softening)
- -meter (instrument used to measure)
- -metry (process of measuring)
- -oma (tumor, swelling)
- -opia (vision as it relates to condition)
- -osis (abnormal condition)
- -pathy (disease)
- -pexy (surgical fixation)
- -phobia (abnormal fear, aversion to specific things)
- -plasty (surgical repair)
- -plegia (paralysis)
- -ptosis (prolapse, drooping, sagging)
- -rrhea (flow, discharge)
- -sclerosis (hardening)
- -scope (instrument used to view)
- -scopy (process of viewing)
- -stomy (creation of artificial opening)
- -tomy (incision, cut into)

Sensory Systems Words

Sensory Systems Medical Terms (Text Version)

Practice the following sensory system words by breaking into word parts and pronouncing.

1. **anisocoria (an-ī-sō-KŌR-ē-ă)**
 - condition of absence of equal pupil (size)
2. **aphakia (ă-FĀ-kē-ă)**
 - condition of no lens
3. **audiogram (OD-ē-ō-gram)**
 - graphic record (radiographic image) of hearing
4. **audiologist (od-ē-OL-ŏ-jĭst)**
 - specialist who studies and treats the hearing
5. **audiology (od-ē-OL-ŏ-jē)**
 - study of the hearing
6. **audiometer (od-ē-OM-ět-ēr)**
 - instrument used to measure hearing
7. **audiometry (od-ē-OM-ět-trē)**
 - measuring hearing
8. **aural (OR-ăl)**
 - pertaining to the ear
9. **binocular (bĭn-ŌK-ŭ-lăr)**
 - pertaining to both eyes
10. **blepharitis (blĕf-ăr-Ī-tĭs)**
 - inflammation of the eyelid
11. **blepharoplasty (BLĕF-ă-rō-plăs-tē)**
 - surgical repair of the eyelid
12. **blepharoptosis (BLĕF-ă-rōp-TŌ-sĭs)**

- condition of drooping of the eyelid
- 13. **cochlear (KOK-lē-ār)**
 - pertaining to the cochlea
- 14. **cochlear implant (KOK-lē-ā IM-plant)**
 - pertaining to the cochlear implant
- 15. **conjunctivitis (kōn-jŭnk-tī-VĪT-īs)**
 - inflammation of the conjunctiva
- 16. **corneal (KOR-nē-ā)**
 - pertaining to the cornea
- 17. **cryoretinopexy (krī-ō-RET-in-ō-pek-sē)**
 - surgical fixation of the retina using extreme cold
- 18. **dacrocystitis (dak-rē-ō-sis-TĪT-īs)**
 - inflammation of the tear (lacrimal) sac
- 19. **dacryocystorhinostomy (dak-rē-ō-sis-tō-rī-NOS-tō-mē)**
 - creation of an artificial opening between the lacrimal sac and the nose
- 20. **diplopia (dip-LŌ-pē-ā)**
 - condition of double vision
- 21. **electrocochleography (ē-lek-trō-kok-lē-OG-rā-fē)**
 - process of recording the electrical activity in the cochlea
- 22. **endophthalmitis (ĕn-dōf-thāl-MĪ-tīs)**
 - inflammation within the eye
- 23. **intraocular (in-trā-OK-yŭ-lār)**
 - pertaining to within the eye
- 24. **iridectomy (ir-ī-DEK-tō-mē)**
 - excision of (part of) the iris
- 25. **iridoplegia (ir-ī-dō-PLĒ-j(ē-)ā, ĩr)**
 - paralysis of the iris
- 26. **iridotomy (ĩr-ĩ-DŌT-ō-mē)**
 - incision into the iris

27. **iritis (ī-RĪT-īs)**
 - inflammation of the iris
28. **isocoria (ī-sō-KŌ-rē-ă)**
 - condition of equal pupils
29. **keratitis (ker-ă-TĪT-īs)**
 - inflammation of the cornea
30. **keratomalacia (kĕr-ă-tō-mă-LĀ-shē-ă)**
 - condition of softening of the cornea
31. **keratometer (kĕr-ă-TŌM-ĕ-ter)**
 - instrument used to measure (the curvature) of the eye
32. **keratoplasty (KER-ăt-ō-plas-tĕ)**
 - surgical repair of the cornea
33. **labyrinthectomy (lab-ĭ-rin-THEK-tŏ-mĕ)**
 - excision of the inner ear (labyrinth)
34. **labyrinthitis (lab-ĭ-rin-THĪT-īs)**
 - inflammation of the inner ear (labyrinth)
35. **lacrimal (LAK-rĭ-măl)**
 - pertaining to the tear duct
36. **leukocoria (loo-kō-KŌR-ē-ă)**
 - condition of white pupil
37. **mastoidectomy (măs-tŏy-d-ĔK-tŏ-mĕ)**
 - excision of the mastoid bone
38. **mastoiditis (mas-toyd-ĪT-īs)**
 - inflammation of the mastoid bone
39. **mastoidotomy (măs-toyd-ŌT-ō-mĕ)**
 - incision into the mastoid bone
40. **myringitis (mĭr-ĭn-JĪ-tĭs)**
 - inflammation of the tympanic membrane
41. **myringoplasty (mĭr-ĪN-gŏ-plăst-ĕ)**

- surgical repair of the tympanic membrane
- 42. **myringotomy (mĭr-ĭn-GŎT-ō-mē)**
 - incision into the tympanic membrane
- 43. **nasolacrimal (nā-zō-LAK-rĭ-māl)**
 - pertaining to the nose and the tear duct
- 44. **nasopharyngeal (nā-zō-FAR-in-gēl)**
 - pertaining to the nose and pharynx (throat)
- 45. **oculomycosis (ōk-ū-lō-mī-KŎ-sĭs)**
 - abnormal condition of the eye caused by a fungus
- 46. **ophthalmalgia (ōf-thāl-MĀL-jē-ă)**
 - condition of pain in the eye
- 47. **ophthalmic (of-THAL-mik)**
 - pertaining to the eye
- 48. **ophthalmologist (ōf-thāl-MŎL-ō-jĭst)**
 - specialist of the eye
- 49. **ophthalmology (Ophth) (ōf-thāl-MŎL-ō-jē)**
 - study of the eye
- 50. **ophthalmopathy (ōf-thāl-MŎP-ă-thē)**
 - disease of the eye
- 51. **ophthalmoplegia (of-thal-mō-PLĒ-j(ē)-ă)**
 - paralysis of the eye
- 52. **ophthalmoscope (of-THAL-mō-skōp)**
 - instrument used to view the eye
- 53. **ophthalmoscopy (of-thal-MOS-kō-pē)**
 - process of viewing the eye
- 54. **optic (OP-tik)**
 - pertaining to vision
- 55. **optometry (op-TOM-ě-trē)**
 - measuring vision

56. **otalgia** (ō-TĀL-jē-ă)
◦ condition of pain in the ear
57. **otologist** (ō-TŌL-ō-jĭst)
◦ specialist who studies and treats disorders and diseases of the ear
58. **otology** (ō-TŌL-ō-jē)
◦ study of the ear
59. **otomastoiditis** (ō-tō-mas-toyd-ĪT-ĭs)
◦ inflammation of the ear and mastoid bone
60. **otomycosis** (ō-tō-mī-KŌ-sĭs)
◦ abnormal condition of fungus in the ear
61. **otopyorrhea** (ō-tō-pī-ō-RĒ-ă)
◦ discharge of pus from the ear
62. **otorhinolaryngologist** (ō-tō-RĪ-nō-lăr-ĭn-GŌL-ō-jĭst)
◦ specialist or physician who studies and treats diseases and disorders of the ears,
63. **otorrhea** (ō-tō-RĒ-ă)
◦ discharge from the ear
64. **otosclerosis** (ō-tō-sklē-RŌ-sĭs)
◦ condition of hardening of the ear
65. **otoscope** (Ō-tō-skōp)
◦ instrument used to view the ear
66. **otoscopy** (ō-TŌS-kō-pē)
◦ process of viewing the ear
67. **phacomalacia** (făk-ō-mă-LĀ-shē-ă)
◦ condition of softening of the lens
68. **photophobia** (fō-tō-FŌ-bē-ă)
◦ condition of sensitivity to light
69. **pseudophakia** (SOOD-ō-FĀ-kē-a)
◦ condition of fake lens
70. **pupillary** (PŪ-pĭ-lēr-ē)

- pertaining to pupil
- 71. **pupillometer** (pū-pīl-ŌM-ě-těr)
 - instrument used to measure the pupil
- 72. **pupilloscope** (pū-pīl-ŌS-kōp)
 - instrument used to view the pupil
- 73. **retinal** (RĚT-ī-nǎl)
 - pertaining to the retina
- 74. **retinoblastoma** (ret-īn-ō-blas-TŌ-mǎ)
 - tumour arising from a developing retinal cell
- 75. **retinopathy** (ret-īn-OP-ǎ-thē)
 - disease of the retina
- 76. **retinoscopy** (ret-īn-OS-kō-pē)
 - process of viewing the retina
- 77. **sclerokeratitis** (sklér-ō-kěr-ǎ-TĪ-tīs)
 - inflammation of the sclera and cornea
- 78. **scleromalacia** (sklě-rō-mā-LĀ-sē-ǎ)
 - softening of the sclera
- 79. **sclerotomy** (sklě-ROT-ō-mē)
 - incision into the sclera
- 80. **stapedectomy** (stā-pě-DEK-tō-mē)
 - excision of the stapes
- 81. **tonometer** (tō-NOM-ět-ěr)
 - instrument used to measure pressure (within the eye)
- 82. **tonometry** (tō-NOM-ě-trē)
 - process of measuring pressure
- 83. **tympanometer** (tīm-pǎ-NŌM-ě-těr)
 - instrument used to measure the middle ear
- 84. **tympanometry** (tīm-pǎ-NŌM-ě-trē)
 - measurement of the tympanic membrane

85. **tympanoplasty** (tĭm-păn-ō-PLĀS-tē)
- membranesurgical repair of the tympanic
86. **vestibular** (ves-TIB-yŭ-lār)
- pertaining to the vestibule
87. **vestibulocochlear** (ves-tĭ-bŭl-ō-KŌ-klē-ar)
- vestibul/o/cochle/ar
 - pertaining to the vestibule and cochlea
88. **xerophthalmia** (zer-of-THAL-mē-ă)
- xer/ophthalm/ia
 - * Rebel, does not follow the rules*
 - condition of dry eye

Activity source: Sensory Systems Medical Terms by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Sensory Systems Medical Terms

Sensory System not easily broken into word parts (Text Version)

1. **astigmatism** (Ast)
 - blurry vision due to irregular curvature of the cornea or lens
2. **Optician**
 - specialist who fills prescriptions for lenses but cannot prescribe
3. **anosmia**
 - condition of being without smell/inability to smell
4. **stye**
 - infection of an oil gland of the eyelid (hordeolum)
5. **amblyopia**
 - reduced vision in one eye

- associated with strabismus (lazy eye)

6. **Optometrist**

- specialist who diagnoses, treats, and manages diseases and disorders of the eye
- Doctor of Optometry

7. **visual acuity (VA)**

- sharpness or clearness of vision

8. **cataract**

- abnormal progressive disease of lens characterized by lack of transparency or cloudiness

Activity source: Sensory System Terms Not Easily Broken into Word Parts by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Commonly Abbreviated Sensory Systems Terms

Practice pronouncing and defining these commonly abbreviated sensory systems terms:

- AD (right ear)
- AMD (age-related macular degeneration)
- AS (left ear)
- Ast (astigmatism)
- Em (emmetropia)
- IOL (intraocular lens)
- IOP (intraocular pressure)
- LASIK (laser-assisted in situ keratomileusis)
- Ophth (ophthalmology)
- PHACO (phacoemulsification)
- PERRLA (pupils, equal, round, reactive, light, accommodation)
- PRK (photorefractive keratectomy)
- VA (visual acuity)
- VF (visual field)
- AOM (acute otitis media)
- ENT (ears, nose, throat)
- EENT (eyes, ears, nose and throat)

- HOH (hard of hearing)
- OM (otitis media)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

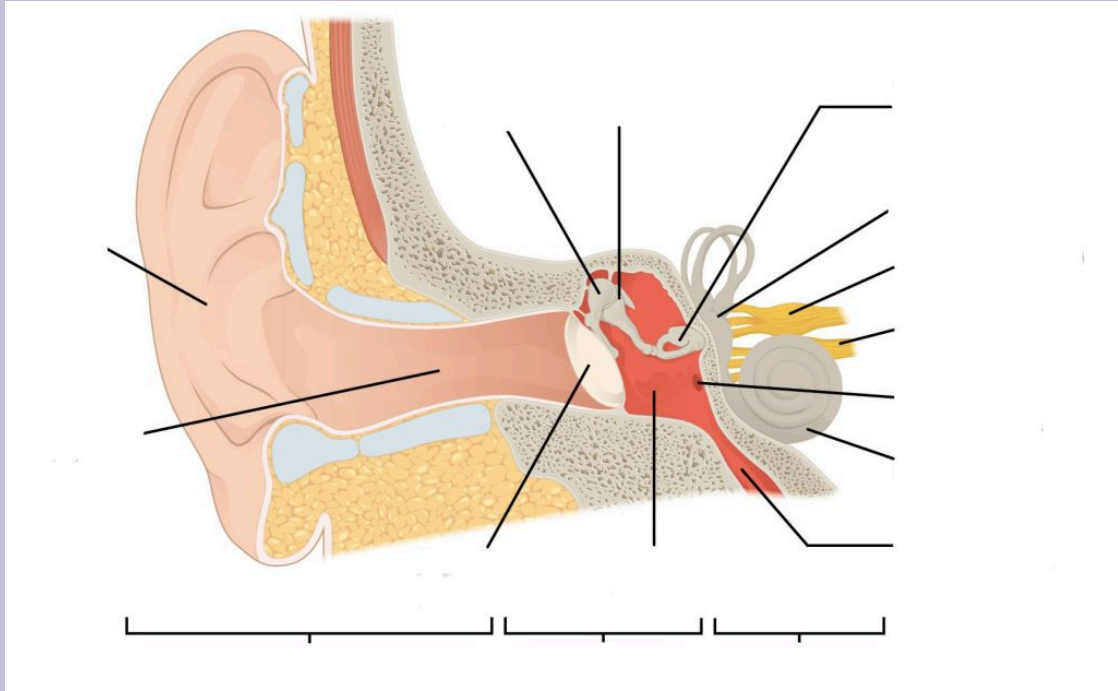
Sensory Systems Structures

Label the following sensory system ear anatomy:

Sensory System Ear Anatomy labeling activity (Text Version)

Label the diagram with correct words listed below:

- | | | |
|-------------------------------------|----------------------|----------------------|
| 1. Parieto-occipital sulcus | 7. Eustachian tube | 13. Round window |
| 2. Ear canal | 8. Middle ear | 14. External ear |
| 3. Stapes (attached to oval window) | 9. Tympanic membrane | 15. Cochlea |
| 4. Tympanic cavity | 10. Malleus | 16. Vestibular nerve |
| 5. Vestibule | 11. Incus | |
| 6. Cochlear nerve | 12. Inner ear | |



Check your answers ¹

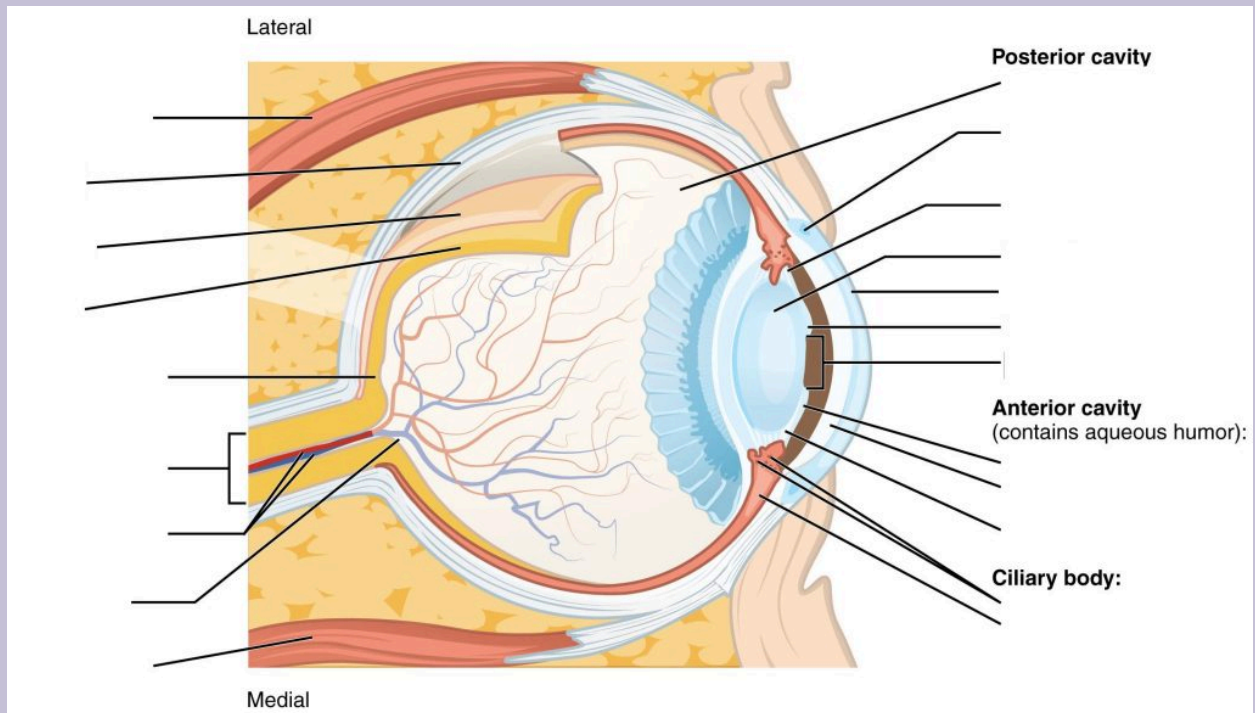
Activity source: Sensory System Ear Anatomy by Gisele tuzon, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Label the following sensory system eye anatomy:

Sensory System Eye Anatomy (Text Version)

Label the diagram with correct words listed below:

- | | | |
|-------------------------|-------------------------------------|---|
| 1. Fovea centralis | 8. Anterior chamber | 15. Lateral rectus muscle |
| 2. Suspensory ligaments | 9. Choroid | 16. Optic (II) nerve |
| 3. Ciliary muscle | 10. Ciliary process | 17. Sclera |
| 4. Retina | 11. Optic disc (blind spot) | 18. Medial rectus muscle |
| 5. Posterior chamber | 12. Lens | 19. Scleral venous sinus (canal of Schlemm) |
| 6. Iris | 13. Central retinal artery and vein | 20. Cornea |
| 7. Vitreous chamber | 14. Suspensory ligaments | 21. Pupil |



Sensory System Eye Anatomy Diagram (Text Version)

This diagram shows a lateral and medial view of the eyeball. The major parts are labelled. Labels read from top, clockwise: showing the posterior cavity including the following structures: _____[Blank 1], _____[Blank 2] (canal of Schlemm), _____[Blank 3], _____[Blank 4], _____[Blank 5], _____[Blank 6], and _____[Blank 7]. Next is the anterior cavity (contains aqueous humor), _____[Blank 8], _____[Blank 9], and _____[Blank 10]. The Ciliary body _____[Blank 11] and _____[Blank 12], _____[Blank 13], _____[Blank 14] (blind spot of the eye), _____[Blank 15], _____[Blank 16], _____[Blank 17], _____[Blank 18], _____[Blank 19], and _____[Blank 20].

Check your answers ²

Activity source: Sensory System Eye Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Sensory System – Consultation Report (Text Version)

Use the words below to fill in the consultation report:

- eye
- halos
- acuity
- iris
- dilate
- ophthalmoscope
- cataracts
- subcapsular
- surgery
- intraocular

PATIENT NAME: Betty FOX

AGE: 72

SEX: Female

DOB: October 2

DATE OF CONSULTATION: August 5

CONSULTING PHYSICIAN: Brian Gates, MD, Ophthalmology

REASON FOR CONSULTATION: Cataracts

HISTORY: I saw Mrs. Fox, a 72-year-old, for her regular _____[Blank 1] examination. She has been wearing reading glasses for several years now but has noticed that she has been having trouble reading and has been seeing _____[Blank 2] around lights while driving at night.

PHYSICAL EXAMINATION: A visual _____[Blank 3] test was performed. I used a slit lamp to view the cornea, _____[Blank 4], lens, and the space between the iris and cornea. I detected tiny abnormalities. I administered drops to _____[Blank 5] the pupils to examine the retina. Using an _____[Blank 6], I was able to examine the lenses for signs of _____[Blank 7]. I was able to determine that Mrs. Fox has posterior _____[Blank 8] cataracts in both eyes.

PLAN: I explained to Mrs. Fox that she required cataract _____[Blank 9]. I explained that her clouded lens would be replaced with an _____[Blank 10] lens – a clear artificial lens. She was in agreeance to having the surgery. I told her we would perform the surgery on her right eye first, then in about eight weeks we would do the left eye. Arrangements for her surgery will be made for next month.

Brian Gates, MD, Ophthalmology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers ³

Activity source: Sensory System – Consultation Report by Heather Scudder, from Building a Medical Terminology Foundation by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. / Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Sensory System – Consultation Report Activity (Text Version)

Use the words below to fill in the consultation report:

- OS
- watering
- antihistamines
- ophthalmalgia
- erythematous
- thyroid
- abnormalities
- masses
- anaesthetic
- puncta
- nasolacrimal
- dacryocystitis
- dacryocystorhinostomy
- medication

PATIENT NAME: Rose MACKENZIE

AGE: 57

SEX: Female

DOB: November 25

DATE OF CONSULTATION: April 16

CONSULTING PHYSICIAN: Ashley Cook MD, Ophthalmology

REASON FOR CONSULTATION: Epiphora in left eye.

HISTORY: Patient is a 57-year-old female who reports epiphora in _____[Blank 1]. Prior to the encounter, she attempted to cure the condition with various _____[Blank 2]. She states that this has been an ongoing issue for the past 2 years, but the _____[Blank 3] has affected her ability to safely drive over the past 8 months. She denied any persistent _____[Blank 4], although noted that the surface of the eye was occasionally irritated and _____[Blank 5] due to rubbing away the tears. She has had no prior eye surgery and no relevant family or personal history of dermatitis or _____[Blank 6] pathologies.

PHYSICAL EXAMINATION: Patient is alert and oriented x 3, and in no acute distress. Examination of the eye surface revealed no _____[Blank 7] other than the erythema and tearing. The skin surrounding the eye appeared normal, with no _____[Blank 8] or swelling.

An irrigation test was then conducted. The eye was treated with _____[Blank 9] eye drops prior to the test. A syringe filled with saline was inserted into the left _____[Blank 10] using a hollow wire. The syringe was then pressed to assess the pressure of the left _____[Blank 11] duct. The fluid did not pass through the nose, indicating inflammation of the duct. No further diagnostic testing was required.

ASSESSMENT: Chronic _____[Blank 12] of the left nasolacrimal duct.

PLAN: Return for _____[Blank 13] in 3 months. Patient was instructed to remove tears using tissue instead of her hand to avoid the risk of infection. No _____[Blank 14] is required in the meantime.

Ashley Cook MD, Ophthalmology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers ⁴

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Test Your Knowledge

Test your knowledge by answering the questions below:

Sensory Systems Glossary Reinforcement activity (Text Version)

1. Specialized neurons that respond to changes in temperature are called _____. [Blank 1].
 - a. thermoreceptors
 - b. mechanoreceptors
 - c. nociceptors
2. Body movement is called _____. [Blank 2].
 - a. kinesthesia
 - b. visceral
 - c. proprioception
3. Sharpness of vision is called _____. [Blank 3].
 - a. visual acuity
 - b. proprioception
 - c. kinesthesia
4. Sensory neurons that respond to pain are called _____. [Blank 4].
 - a. thermoreceptors
 - b. nociceptors
 - c. glossopharyngeal
5. The eardrum is also called _____. [Blank 4].

- a. glossopharyngeal
- b. mechanoreceptors
- c. tympanic membrane

Check your answers ⁵

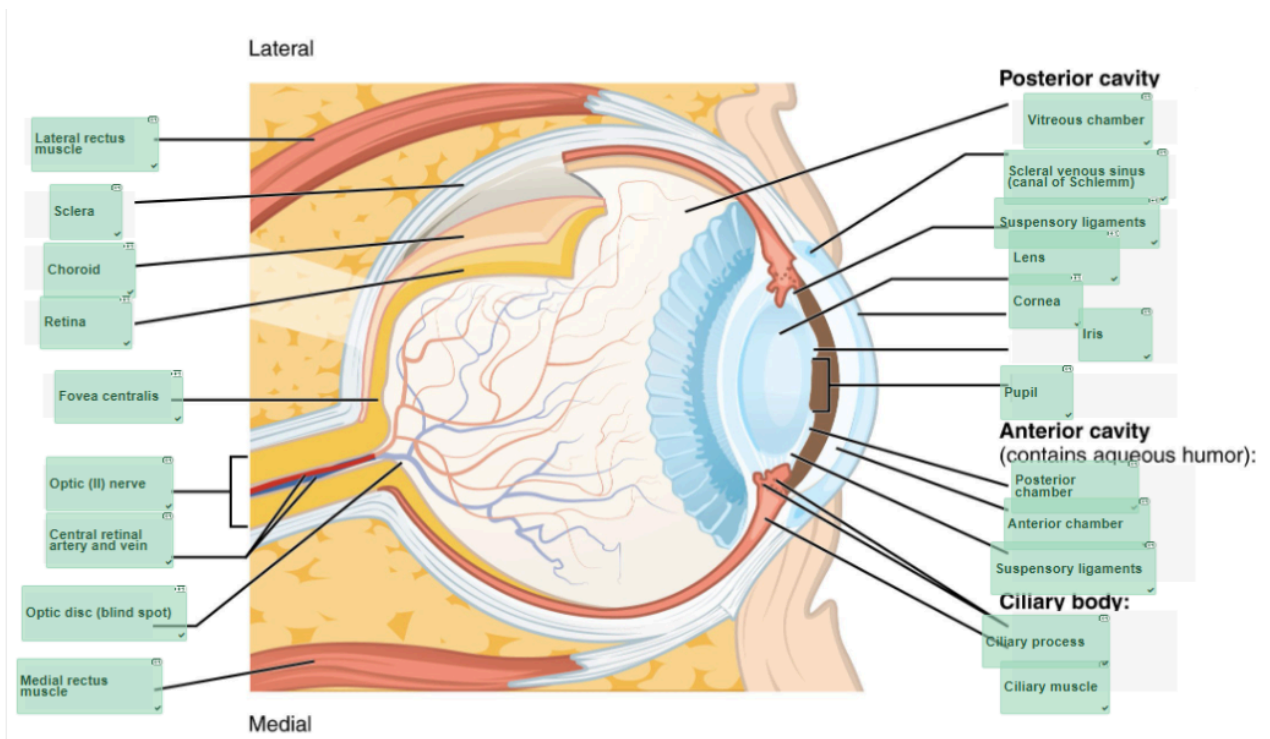
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Notes

1. **answers: Sensory System Ear Anatomy labeling activity (Text Version)text** **Check your**



2.

Check your answers: Sensory System Eye Anatomy Diagram (Text Version) This diagram shows a lateral and medial view of the eyeball. The major parts are labelled. Labels read from top, clockwise: showing the posterior cavity including the following structures: **vitreous chamber**, **scleral venous sinus** (canal of Schlemm), **suspensory ligaments**, **lens**, **cornea**, **iris**, and **pupil**. Next is the anterior cavity (contains aqueous humor), **posterior chamber**, **anterior chamber**, and **suspensory ligaments**. The Ciliary body **ciliary process** and **ciliary muscle**, **medial rectus muscle**, **optic disc** (blind spot of the eye), **central retinal artery and vein**, **foveal centralis**, **optic nerve**, **retina**, **choroid**, **sclera**, and **lateral rectus muscle**.

3. 1. eye, 2. halos, 3. acuity, 4. iris, 5. dilate, 6. ophthalmoscope, 7. cataracts, 8. subcapsular, 9. surgery, 10. intraocular
4. 1. OS, 2. antihistamines, 3. watering, 4. ophthalmalgia, 5. erythematous, 6. thyroid, 7. abnormalities, 8. masses, 9. anaesthetic, 10. puncta, 11. nasolacrimal, 12. dacryocystitis, 13. dacryocystorhinostomy, 14. medication
5. 1. thermoreceptors, 2. kinesthesia, 3. Sharpness of vision is called..., 4. Sensory neurons that respond to pain are called..., 5. The eardrum is also called...

CHAPTER 16: NERVOUS SYSTEM

Nervous System

If you would like to review the textbook chapter content, please visit **Chapter 16: Nervous System [New Tab]**.

Learning Objectives

- Identify the anatomy of the nervous system and describe the main functions of the nervous system
- Analyze, translate, and define medical terms and common abbreviations of the nervous system and use correct abbreviations
- Practice the spelling and pronunciation of nervous system terminology
- Identify the medical specialties associated with the nervous system and explore common diseases, disorders, and procedures related to the nervous system

Key Word Components

Identify meanings of key word components of the nervous system:

Prefixes

- a- (absence of, without, no, not)
- an- (absence of, without, no, not)
- pan- (all, total)
- post- (after)
- para- (beside, beyond, around, abnormal)
- pre- (before)
- sub- (below, under)
- dys- (painful, abnormal, difficult, labored)

- intra- (within)
- hemi- (half)
- hyper- (above, excessive)
- inter- (between)
- poly- (many, much)

Combining Forms

- alg/o (sensitivity to pain)
- cephal/o (head)
- cerebell/o (cerebellum)
- cerebr/o (cerebrum)
- dur/o (dura mater, hard)
- encephal/o (brain)
- esthesi/o (sensation, sensitivity)
- gangli/o (ganglion)
- ganglion/o (ganglion)
- gli/o (glia, gluey substance)
- mening/o (meninges)
- meningi/o (meninges)
- ment/o (mind)
- mon/o (one, single)
- myel/o (spinal cord)
- neur/o (nerve)
- phas/o (speech)
- poli/o (gray matter)
- pont/o (pons- structure in the brain)
- psych/o (mind)
- quadr/i (four)
- radic/o (nerve root)
- radicul/o (nerve root)
- rhiz/o (nerve root)
- thalam/o (thalamus)
- thec/o (sheath)
- vag/o (vagus nerve)

Suffixes

- -al (pertaining to)
- -algia (pain)
- -algesia (sensitivity to pain)

- -cele (hernia, protrusion)
- -cyte (cell)
- -ectomy (excision, surgical removal, cutting out)
- -genic (producing, originating, causing)
- -gram (the record, radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording, radiographic imaging)
- -ia (condition of, diseased state or abnormal state)
- -ic (pertaining to)
- -iatrist (specialist, physician)
- -iatry (specialty, treatment)
- -ictal (seizure, attack)
- -itis (inflammation)
- -lepsy (seizure)
- -logist (specialist, physician)
- -logy (study of)
- -lysis (loosening, dissolution, separating)
- -malacia (softening)
- -oid (resembling)
- -oma (tumor)
- -osis (abnormal condition)
- -paresis (slight paralysis)
- -pathy (disease)
- -phasia (speech)
- -plasty (surgical repair)
- -plegia (paralysis)
- -praxia (to perform, action)
- -sclerosis (hardening)
- -rrhaphy (suturing, repairing)
- -tomy (incision, cut into)

Nervous System Words

Nervous System Medical Terms (Text Version)

Practice the following **nervous system** words by breaking into word parts and pronouncing.

1. **quadriplegia**

- quadr/i/plegia
 - paralysis of four (limbs)
2. **neurectomy**
- neur/ectomy
 - excision of nerves
3. **poliomyelitis**
- poli/o/myel/itis
 - inflammation of gray matter of the spinal cord
4. **intracerebral**
- intra/cerebr/al
 - pertaining to within the cerebrum
5. **encephalosclerosis**
- encephal/o/sclerosis
 - hardening of the brain
6. **interictal**
- inter/ictal
 - occurs between seizures or attacks
7. **rhizotomy**
- rhiz/o/tomy
 - incision into a nerve root
8. **hyperesthesia**
- hyper/esthesi/a
 - excessive sensitivity to stimuli
9. **mental**
- ment/al
 - pertaining to the brain
10. **neuralgia**
- neur/algia
 - pain of the nerves
11. **radiculopathy**
- radicul/o/pathy
 - disease of the nerve roots
12. **panplegia**

- pan/plegia
- total paralysis

13. **monoparesis**

- mon/o/paresis
- slight paralysis of one (limb)

14. **duritis**

- dur/itis
- inflammation of the dura mater

15. **anesthesia**

- an/esthesi/a
- without (loss of) feeling or sensation

16. **cerebellitis**

- cerebell/itis
- inflammation of the cerebellum

17. **encephalomalacia**

- encephal/o/malacia
- softening of the brain

18. **cerebral thrombosis**

- cerebr/al thromb/osis
- Abnormal condition of blood clot pertaining to the cerebrum (blood clot in a blood vessel in the brain)

19. **craniocerebral**

- crani/o/cerebr/al
- pertaining to the cranium and cerebrum

20. **glioma**

- gli/oma
- tumour composed of the glial tissue

21. **psychiatrist**

- psych/iatrist
- physician who studies and treats disorders of the mind

22. **cephalgia**

- ceph/algia
- *rebel does not follow the rules*

- Pain in the head (headache)

23. **neuroma**

- neur/oma
- tumour made up of nerve (cells)

24. **psychogenic**

- psych/o/genic
- originating in the mind

25. **polyneuropathy**

- poly/neur/o/pathy
- disease of many nerves

26. **psychosis**

- psych/osis
- abnormal condition of the mind

27. **mononeuropathy**

- mon/o/neur/o/pathy
- disease affecting a single nerve

28. **electroencephalograph**

- electr/o/encephal/o/graph
- instrument used to record electrical activity of the brain

29. **radicotomy**

- radic/o/tomy
- incision into a nerve root

30. **aphasia**

- a/phas/ia
- condition of without speaking

31. **poliomyelitis**

- poli/o/myel/itis
- inflammation of the gray matter of the spinal cord

32. **gangliitis**

- gangli/itis
- inflammation of the ganglion

33. **hemiplegia**

- hemi/plegia
 - paralysis of half (right or left) side of the body
34. **subdural hematoma**
- sub/dur/al hemat/oma
 - tumour filled with blood pertaining to below the dura mater
35. **dysphasia**
- dys/phas/ia
 - condition of difficulty speaking
36. **encephalitis**
- encephal/itis
 - inflammation of the brain
37. **subdural**
- sub/dur/al
 - pertaining to below the dura mater
38. **neurology**
- neur/o/logy
 - study of nerves
39. **CT myelography**
- CT myel/o/graphy
 - process of recording the spinal cord with computed tomography
40. **glioblastoma**
- gli/o/blast/oma
 - tumour composed of developing glial tissue
41. **neuroid**
- neur/oid
 - resembling a nerve
42. **neuroarthropathy**
- neur/o/arthr/o/pathy
 - disease of the nerves and joints
43. **meningitis**
- mening/itis
 - inflammation of the meninges
44. **hemiparesis**

- hemi/paresis
 - slight paralysis of half (right or left) side of the body
45. **neurorrhaphy**
- neur/o/rrhaphy
 - suturing of a nerve
46. **psychology**
- psych/o/logy
 - study of the mind
47. **neurologist**
- neur/o/logist
 - specialist who studies and treats the nervous system
48. **neuroplasty**
- neur/o/plasty
 - surgical repair of a nerve
49. **psychopathy**
- psych/o/pathy
 - disease of the mind
50. **preictal**
- pre/ictal
 - occurs before a seizure or attack
51. **radiculitis**
- radicul/itis
 - inflammation of the nerve roots
52. **electroencephalography**
- electr/o/encephal/o/graphy
 - process of recording the electrical activity of the brain
53. **cerebral angiography**
- cerebr/al angi/o/graphy
 - process of recording (blood) vessel pertaining to the cerebrum
54. **psychiatry**
- psych/iatry
 - specialty of the mind
55. **psychosomatic**

- psych/o/somat/ic
- pertaining to the mind and body

56. **neurotomy**

- neur/o/tomy
- incision into a nerve

57. **cerebral**

- cerebr/al
- pertaining to the brain

58. **neuropathy**

- neur/o/pathy
- disease of (peripheral) nerves

59. **myelomalacia**

- myel/o/malacia
- softening of the spinal cord

60. **encephalomyeloradiculitis**

- encephal/o/myel/itis
- inflammation of brain, spinal cord and nerve roots

61. **monoplegia**

- mon/o/plegia
- paralysis of one (limb)

62. **meningomyelocele**

- mening/o/myel/o/cele
- protrusion of the meninges and spinal cord

63. **paresthesia**

- par/esthesi/a
- * rebel does not follow the rules*
- abnormal sensation in the extremities

64. **psychologist**

- psych/o/logist
- specialist of the mind

65. **postictal**

- post/ictal
- occurs after a seizure or attack

66. **meningioma**

- meningi/oma
- tumour of the meninges

67. **neurolysis**

- neur/o/lysis
- dissolution of nerve (for pain management)

68. **electroencephalogram**

- electr/o/encephal/o/gram
- the record of electrical activity of the brain

69. **gliocyte**

- gli/o/cyte
- glial cell

70. **polyneuritis**

- poly/neur/itis
- inflammation of many nerves

71. **neuritis**

- neur/itis
- inflammation of the nerves

72. **ganglionectomy**

- ganglion/ectomy
- excision of a ganglion

73. **meningocele**

- mening/o/cele
- protrusion of the meninges

74. **rhizomeningomyelitis**

- rhiz/o/mening/o/myel/itis
- inflammation of the nerve root, meninges and spinal cord

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Pronouncing and Defining Commonly Abbreviated Nervous System Terms

Practice pronouncing and defining these commonly abbreviated nervous system terms:

- AD (Alzheimer's disease)
- ADHD (attention deficit hyperactivity disorder)
- ALS (amyotrophic lateral sclerosis)
- CNS (central nervous system)
- CP (cerebral palsy)
- CSF (cerebrospinal fluid)
- CTE (chronic traumatic encephalopathy)
- CVA (cerebrovascular accident)
- EEG (electroencephalogram)
- EP studies (evoked potential studies)
- LP (lumbar puncture)
- MRI (magnetic resonance imaging)
- MS (multiple sclerosis)
- OCD (obsessive-compulsive disorder)
- PD (Parkinson's disease)
- PET (positron emission tomography)
- PNS (peripheral nervous system)
- PTSD (post-traumatic stress disorder)
- SAH (subarachnoid hemorrhage)
- TIA (transient ischemic attack)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)

- **Anatomic** (terms related to body structure)

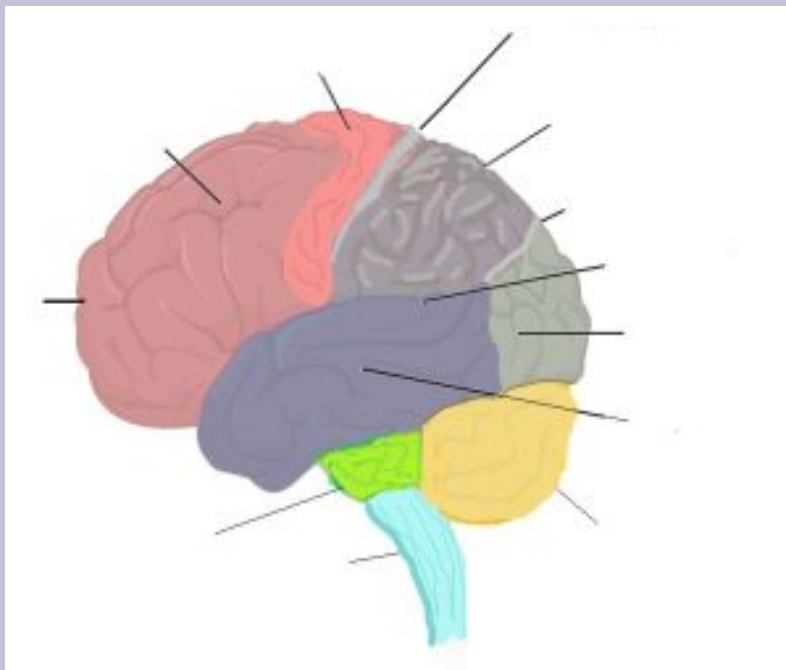
Nervous System Structures

Label the following nervous system anatomy:

Nervous System Brain Anatomy Labeling Activity (Text Version)

Label the diagram with correct words listed below:

- | | | |
|---|-------------------|------------------------------|
| 1. Central sulcus, longitudinal fissure | 5. Occipital lobe | 9. Brainstem |
| 2. Pons | 6. Cerebrum | 10. Parietal lobe |
| 3. Precentral gyrus | 7. Cerebellum | 11. Temporal lobe |
| 4. Frontal Lobe | 8. Lateral Sulcus | 12. parieto-occipital sulcus |



Nervous System Brain Anatomy Labeling Activity Diagram (Text Version)

This diagram shows the lateral view of the brain and the major lobes which are labeled. From the front of the brain (left): _____[Blank 1] is responsible for thought processes, followed by a raised surface area known as _____[Blank 2], a deep groove known as the _____[Blank 3], and another raised area known as _____[Blank 4]. The _____[Blank 5] is responsible for processes senses such as the sense of touch, followed by the _____[Blank 6] which is another deep groove on the surface of the brain. The _____[Blank 7] processes visual fields and the _____[Blank 8], which is responsible for memory capacity. The _____[Blank 9] is responsible for balance, followed by the _____[Blank 10], which is often referred to as the medulla

oblongata, and finally is the _____,[Blank 11] which is known as the bridge connecting the cerebrum to the cerebellum. The _____ [Blank 12] is a deep groove on the surface of the cerebrum.

Check your answers ¹

Activity source: Nervous System Brain Anatomy labeling activity by Sheila Bellefeuille from *Building a Medical Terminology Foundation*, illustration from *Anatomy and Physiology (OpenStax)*, licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Neurological System – History and Physical Examination (Text version)

Use the words below to fill in the history and physical examination form:

- festination
- depression
- fatigue
- postural
- rigidity
- cognition
- downgoing
- q.i.d

PATIENT NAME: Susan LOGAN

AGE: 62

SEX: Female

DOB: March 24

DATE OF ASSESSMENT: December 10

ADMITTING PHYSICIAN: Martin Lewis, MD, Neurology

DIAGNOSIS: Parkinson disease

HISTORY: This pleasant and co-operative 62-year-old woman has advanced parkinsonism which presents for more than 10 years. It is affecting her daily living to a great degree. She has minor difficulty with ADLs noted in difficulty dressing and meal preparation. She has had frequent falls occasionally related to freezing or to _____[Blank 1] but also occurring without any apparent cause. She has marked hesitancy on changing direction and unsteadiness after exertion and develops _____[Blank 2]. She has a minor problem with sialorrhea, eating, and swallowing. She can maintain basic personal hygiene without any difficulty. However, showering or bathing requires assistance. She has had some symptoms of anxiety and _____[Blank 3] along with her Parkinson disease.

PHYSICAL EXAMINATION: On neurologic exam, she did have mild-to-moderate impairment in _____[Blank 4] and short-time memory, although she is alert and oriented x3. She has pronounced tremor, worse in the left arm than the right. She has marked _____[Blank 5] in the upper left extremity; mild in the right. She has marked reduction of movement with long delays in initiating movement and frequent freezing. She has a moderately-flexed posture and cannot straighten to command. She has

_____ [Blank 6] instability. Her speech is mildly dysarthric. She has paucity of spontaneous facial expression. She has an unsteady and erratic gait characterized by shuffling strides with festination in propulsion. She can arise from a chair with difficulty only after multiple attempts. Deep tendon reflexes (DTRs) are symmetrical, and toes are _____ [Blank 7]. Cranial nerves are intact and unremarkable.

TREATMENT AND PLAN: She has been on Sinemet 25/100 t.i.d. for the last 7 years or so. She will be going on vacation soon, and I do not wish to start a second antiparkinsonian medication while she away from medical supervision. However, I have asked her to increase her Sinemet dose to _____ [Blank 8]. We will see how she does with Sinemet and plan to add bromocriptine 1 mg per day when she returns.

FOLLOW UP: The patient has been scheduled for follow up in 3 weeks, upon her return from vacation. Her treatment regimen will be adjusted at that time.

Martin Lewis, MD, Neurology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

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Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Neurological System – Consultation Report (Text version)

Use the word below to fill in the consultation report:

- cognition
- dementia
- hypertension
- downgoing
- neurological
- symptomatic
- MRI
- stroke
- blurred

NEUROLOGICAL SYSTEM – CONSULTATION REPORT

PATIENT NAME: Robert BROWN

AGE: 74

SEX: Male

DOB: July 5

DATE OF CONSULTATION: April 15

CONSULTING PHYSICIAN: Martin Lewis, MD, Neurology

REASON FOR CONSULTATION: Assessment of cognitive changes and testing.

HISTORY: The patient presented a few days ago with a marked change in _____[Blank 1] identified by his family members and care staff. The reports describe two episodes of the patient presenting a somewhat confused state, instability with a “holding of the temples” and a report of blurring vision. The patient was also observed holding on to walls and furniture to walk around. This seems to have been two transient episodes and has not recurred since. Prior to that, he had maintained excellent cognitive abilities with full lingual ability, no signs of aphasia, _____[Blank 2] or loss of consciousness. The cognitive decline noticed was not of gradual onset but rather an acute change within hours to a day. The time span is unclear as the patient lives alone and there was a time lapse between a family visit and the arrival of a personal care assistant.

The patient is a good historian to questioning and does admit to some recent occasional headaches and _____[Blank 3] vision. These are new to him as he reports never having “had a headache” in his “whole life”. He reports that the blurring is not constant but only seems to occur when he turns his head to right or left suddenly. There is a “tilting sensation” like he will fall but this clears when he brings his head back to center. He has no history of epilepsy or seizure disorders. No history of TM or ear trauma.

PHYSICAL EXAMINATION: HEENT: Head is normocephalic. EYES: PERRLA. EARS: Auditory exam reveals intact TMs bilaterally. No erythema. The nose and throat exam is unremarkable. NECK: JVD appears normal. VITAL SIGNS: Blood pressure is 132/86 with no previous history of _____[Blank 4]. Pulse is 83 and resp. 22 but the patient does admit to feeling anxious during the assessment. Temperature 37C.

NEURO: Orientation and language are normal. Extremity strength testing show some minimal weakness in the right upper. Reflexes are normal. Toes are _____[Blank 5] bilaterally. Has difficulty with heel-and toe-walk and is unable to tandem walk. The gait is alternately normal and minimally spastic.

IMPRESSION: What appears to be a transient or acute cognitive change with altered awareness, headache and cephalo-positional blurring of vision. There is some _____[Blank 6] change, although minimal and not clinically diagnostic, as evidenced by the slight changes in gait during testing but it does not remain consistently. This is puzzling.

PLAN: It is still not clear to me what these spells are. Some of the neurological possibilities to be considered are TIA, _____[Blank 7], brain and spinal cord tumors, inflammation, infection, vascular irregularities, and some neurodegenerative disorders. I have ordered a stat cerebral _____[Blank 8], electroencephalogram (EEG) and blood levels for CBC, chem panel. However, I feel we should also rule out the more common possibilities of pseudo-seizure, vertigo, and inner ear anomalies and am in the process of making these appropriate bookings.

I have booked a follow up with this patient in 10 days to review the results. He and his family have been advised to contact me immediately if he has another “spell” or to present to the ER where we can complete testing when the patient is _____[Blank 9].

Thank you for this most interesting referral. I will be in touch after I have reviewed the patient.

Martin Lewis, MD, Neurology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical

terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

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Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Neurological System – Follow Up Report (Text version)

Use the words below to fill in the follow-up report:

- electroencephalogram
- balance
- pathology
- vertigo
- coordination
- white matter
- hemorrhagic
- wasting
- calcifications
- mass
- somnolence
- symptomatic

PATIENT NAME: Randy NORTON

AGE: 74

SEX: Male

DOB: October 14

DATE OF ASSESSMENT: January 18

ASSESSING PHYSICIAN: Martin Lewis, MD, Neurology

REASON FOR ASSESSMENT: Follow up assessment of cognitive changes and testing.

HISTORY: This 74-year-old patient was seen in consultation 10 days ago for assessment of cognitive changes. He underwent prescribed testing in the forms of cerebral MRI, _____[Blank 1] (EEG) and blood was drawn for CBC and chem panel. The patient was seen by our local ENT for inner ear and _____[Blank 2] testing. Test results showed normal hearing. No evidence of an inner ear _____[Blank 3] that might have contributed to the _____[Blank 4] or lack of balance and _____[Blank 5] reported as part of the presenting symptoms.

TEST RESULTS: Cerebral MRI reveals a few T2 hyperintensities in the _____[Blank 6] in the left temporal lobe. The right hemisphere shows some diffuse _____[Blank 7] and some occipital wasting. There are multiple, small dark _____[Blank 8] areas and a few areas indicative of ischemia.

EEG: This showed some depressive effect indicative of an encephalopathy. The patient did not sleep during the exam but did show some signs of _____[Blank 9]. CBC and chem panels were normal.

IMPRESSIONS: This patient present with testing result that may be warning for Alzheimer wasting and also, some localized hemorrhagic events that have since stopped. This type of “leakage” is often not _____[Blank 10], and I do not feel that they are connected to his presenting complaints. I see no signs of tumor or _____[Blank 11] formation nor infectious process.

On repeat verbal assessment, the patient reports he has not experienced any more of the spells. We will follow him closely in regards to the _____[Blank 1]2 with a repeat MRI and perhaps a CT also in 3 months for results comparison to see whether the wasting has advanced or receded.

Thank you for asking me in on this most interesting case.

Martin Lewis, MD, Neurology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ⁴

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Test Your Knowledge

Test your knowledge by answering the questions below:

Nervous System Glossary Reinforcement Activity (Text version)

1. The outer gray matter covering the forebrain, marked by wrinkles and folds known as gyri and sulci is called the _____[Blank 1].
 - a. Multipolar
 - b. Cerebral cortex
 - c. Dendrite
2. The single process of the neuron that carries an electrical signal (action potential) away from the cell body toward a target cell is called the _____[Blank 2].
 - a. Axon
 - b. Cauda equina

- c. Cerebrum
3. The large opening in the occipital bone of the skull through which the spinal cord emerges and the vertebral arteries enter the cranium is called the _____[Blank 3].
- a. Foramen magnum
 - b. Corpus callosum
 - c. Dura mater
4. The disruption of blood flow to the brain because blood cannot flow through blood vessels as a result of a blockage or narrowing of the vessel is called _____[Blank 4].
- a. Ischemic stroke
 - b. Embolus
 - c. Initial segment
5. The major region of the diencephalon that is responsible for coordinating autonomic and endocrine control of homeostasis is called the _____[Blank 5].
- a. Hypothalamus
 - b. Myelin
 - c. Neuron

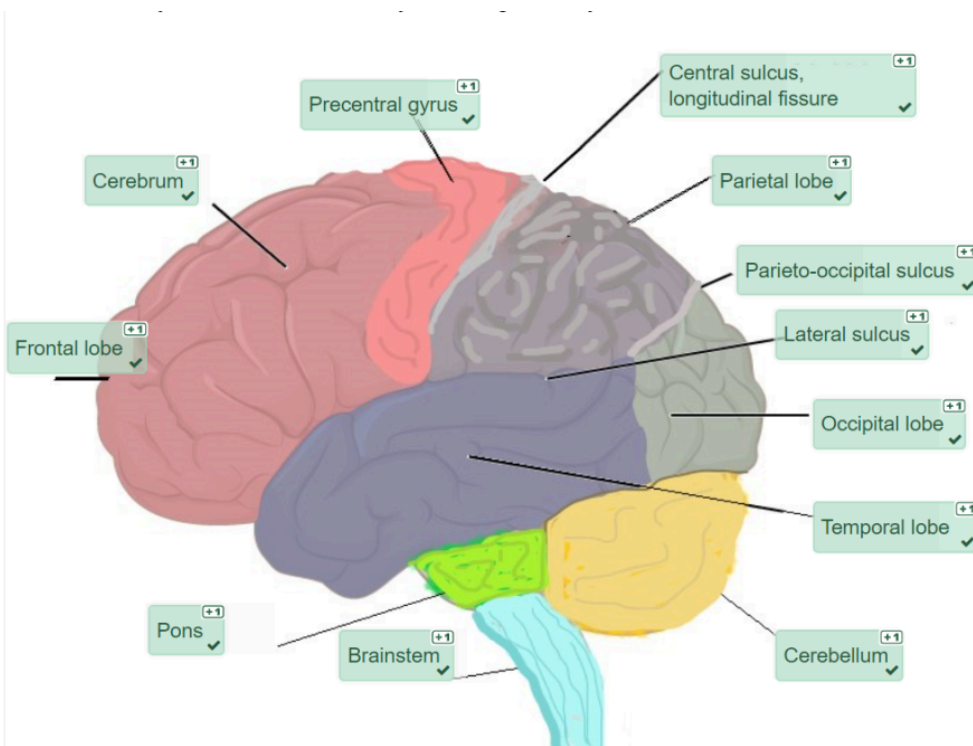
Check your answers: ⁵

Activity source: Nervous System Glossary Reinforcement Activity by Gisele Tuzon, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

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Notes



1.

Check

your answers: Nervous System Brain Anatomy labeling activity Diagram (Text Version) This diagram shows the lateral view of the brain and the major lobes which are labeled. From the front of the brain (left): **frontal lobe** is responsible for thought processes and is part of the **cerebrum**, followed by a raised surface area known as **precentral gyrus**, a deep groove known as the **central sulcus**, and another raised area known as **postcentral gyrus**. The **parietal lobe** is responsible for processes senses such as the sense of touch, followed by the **lateral sulcus** which is another deep groove on the surface of the brain. The **occipital lobe** processes visual fields and the **temporal lobe**, which is responsible for memory capacity. The **cerebellum** is responsible for balance, followed by the **brainstem** which is often referred to as the medulla oblongata, and finally is the **pons**, which is known as the bridge connecting the cerebrum to the cerebellum. The **parieto-occipital sulcus** is a deep groove on the surface of the cerebrum.

2. 1.festination, 2.fatigue, 3.depression, 4.cognition, 5.rigidity, 6.postural, 7.downgoing, 8.q.i.d,
3. 1.cognition, 2.dementia, 3.blurred, 4.hypertension, 5.downgoing, 6.neurological, 7.stroke, 8.MRI, 9.symptomatic
4. 1.electroencephalogram, 2.balance, 3.pathology, 4.vertigo, 5.coordination, 6.white matter, 7.calcifications, 8.hemorrhagic, 9.somnolence, 10.symptomatic, 11.mass, 12.wasting
5. 1. a) Cerebral cortex, 2.a) Axon, 3. a) Foramen magnum, 4. a) Ischemic stroke, 5. a) Hypothalamus

CHAPTER 17: ENDOCRINE SYSTEM

Endocrine System

If you would like to review the textbook chapter content, please visit [Chapter 17: Endocrine System \[New Tab\]](#).

Learning Objectives

- Identify the anatomy of the endocrine system and describe the main functions of the endocrine system
- Analyze, translate, and define medical terms and common abbreviations of the endocrine system
- Practice the spelling and pronunciation of endocrine system terminology
- Identify the medical specialties associated with the endocrine system and explore common diseases, disorders, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of the endocrine system:

Prefixes

- eu- (good, normal)
- hypo- (below, under, deficient)
- hyper- (above, excessive)
- oxy- (rapid, sharp, acid)
- para- (around, beside, beyond, abnormal)
- pan- (all, total)
- poly- (many or much)
- syn- (joined, together)
- tetr- (four)

- tri- (three)

Combining Forms

- acr/o (extremities, height)
- aden/o (gland)
- adren/o (adrenal glands)
- adrenal/o (adrenal glands)
- calc/i (calcium)
- cortic/o (cortex, outer layer of a body organ)
- dips/o (thirst)
- glyc/o (sugar)
- endocrin/o (endocrine)
- home/o (sameness)
- kal/i (potassium)
- myx/o (mucus)
- natr/o (sodium)
- parathyroid/o (parathyroid gland)
- phys/o (growing)
- pituitar/o (pituitary gland)
- somat/o (body)
- thyr/o (thyroid gland)
- thyroid/o (thyroid gland)

Suffixes

- -drome (run, running together)
- -ectomy (excision, cut out)
- -emia (in the blood)
- -ia (condition of, abnormal state, diseased state)
- -ism (state of)
- -itis (inflammation)
- -logist (specialist or physician who studies and treats)
- -logy (study of)
- -megaly (enlarged, enlargement)
- -oid (resembling)
- -oma (tumor)
- -pathy (disease)
- -plasia (condition of, formation, development, growth)
- -tomy (incision, cut into)

Endocrine System Words

Endocrine System Medical Terms (Text Version)

Practice the following endocrine system words by breaking into word parts and pronouncing.

1. **endocrinopathy**

- endocrin/o/pathy
- disease of the endocrine system

2. **adrenalectomy**

- adrenal/ectomy
- excision of the adrenal glands

3. **parathyroidectomy**

- parathyroid/ectomy
- excision of the parathyroid glands

4. **adenitis**

- aden/itis
- inflammation of the gland

5. **parathyroidoma**

- parathyroid/oma
- tumour of the parathyroid glands

6. **thyroiditis**

- thyroid/itis
- inflammation of the thyroid gland

7. **thyroidotomy**

- thyroid/o/tomy
- incision into the thyroid gland

8. **hyperthyroidism**

- hyper/thyroid/ism
- state of excessive thyroid gland activity

9. **acromegaly**

- acr/o/megaly

- enlargement of the extremities
10. **adrenomegaly**
- adren/o/megaly
 - enlargement of one or both adrenal glands
11. **glycemia**
- glyc/emia
 - sugar in the blood
12. **hypokalemia**
- hypo/kal/emia
 - deficient potassium in the blood
13. **hypopituitarism**
- hypo/pituitar/ism
 - state of deficient pituitary gland activity
14. **adenomegaly**
- aden/o/megaly
 - enlarged gland
15. **hypocalcemia**
- hypo/calc/emia
 - deficient calcium in the blood
16. **polydipsia**
- poly/dips/ia
 - condition of excessive thirst
17. **hypoglycemia**
- hypo/glyc/emia
 - deficient sugar in the blood
18. **hyperkalemia**
- hyper/kal/emia
 - excessive potassium in the blood
19. **endocrinopathy**
- endocrin/o/pathy
 - disease of the endocrine system
20. **hypercalcemia**

- hyper/calc/emia
- excessive calcium in the blood

21. **panhypopituitarism**

- pan/hypo/pituitar/ism *rebel does not follow the rules
- state of total deficient pituitary gland activity

22. **cortical**

- cortic/al
- pertaining to the cortex

23. **thyroidectomy**

- thyroid/ectomy
- excision of the thyroid gland

24. **syndrome**

- syn/drome
- run together (signs and symptoms occur together characterizing of a specific disorder)

25. **thyroparathyroidectomy**

- thyr/o/parathyroid/ectomy
- excision of the thyroid gland and parathyroid glands

26. **adrenalitis**

- adrenal/itis
- inflammation of adrenal glands

27. **thyroidectomy**

- thyroid/ectomy
- excision of the thyroid gland

28. **endocrinologist**

- endocrin/o/logist
- specialist who studies and treats diseases of the endocrine system

29. **adrenopathy**

- adren/o/pathy
- disease of the adrenal gland(s)

30. **corticoid**

- cortic/oid
- resembling the cortex

31. **euthyroid**

- eu/thyr/oid
- resembling a normal thyroid gland

32. **endocrinology**

- endocrin/o/logy
- study of the endocrine system

33. **hyponatremia**

- hypo/natr/emia
- deficient sodium in the blood

34. **adenectomy**

- aden/ectomy
- excision of a gland

35. **euglycemia**

- eu/glyc/emia
- normal (level) of blood sugar in the blood

36. **adenosis**

- aden/osis
- abnormal condition of a gland

37. **adrenocorticohyperplasia**

- adren/o/cortic/o/hyper/plasia
- excessive development of the adrenal cortex

Activity source: Endocrine System Medical Terms by Kimberlee Carter, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Pronouncing and Defining Commonly Abbreviated Endocrine System Terms

Practice pronouncing and defining these commonly abbreviated endocrine system terms:

- ACTH (adrenocorticotrophic hormone)
- ADH (antidiuretic hormone)
- DI (diabetes insipidus)

- DKA (diabetic ketoacidosis)
- DM (diabetes mellitus)
- FBS (fasting blood sugar)
- FNA (fine needle aspiration)
- FSH (follicle-stimulating hormone)
- GH (growth hormone)
- HbA1C (glycosylated hemoglobin)
- LH (luteinizing hormone)
- PRL (prolactin)
- RAIU (radioactive iodine uptake)
- Thyroid Profile (T4, T3, and TSH)
- T4 (thyroxine level)
- T3, (triiodothyronine level)
- TSH (thyroid stimulating hormone)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

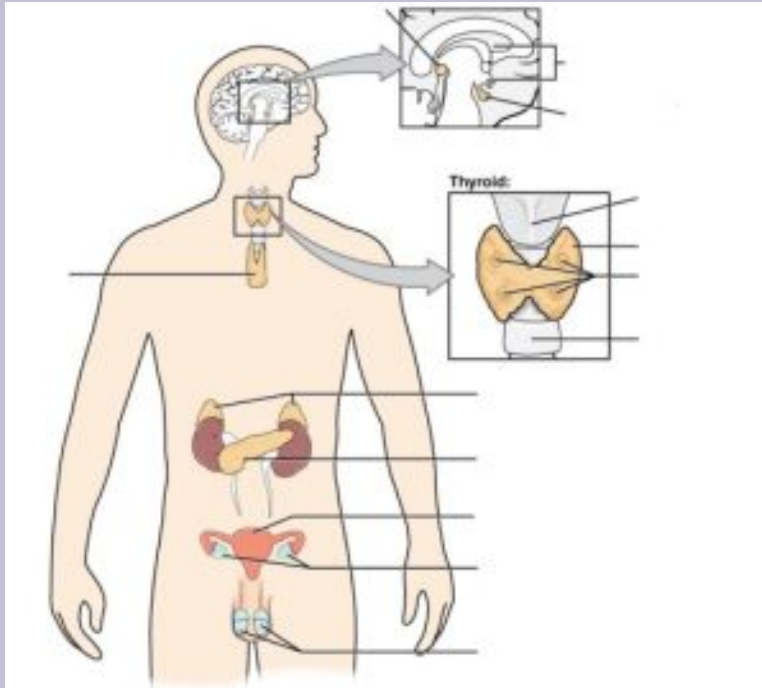
Endocrine System Structures

Label the following endocrine system anatomy:

Endocrine System Anatomy labeling activity (Text Version)

Label the diagram with words listed below:

- | | | |
|------------------------------------|----------------------|---|
| 1. Trachea | 6. Thyroid gland | 11. Parathyroid glands (on posterior side of thyroid) |
| 2. Testes (male) | 7. Thalamus | 12. Thymus |
| 3. Pancreas | 8. Adrenal glands | 13. Pituitary gland |
| 4. Thyroid cartilage of the larynx | 9. Uterus | |
| 5. Pineal gland | 10. Ovaries (female) | |



Endocrine System Diagram (Text Version)

This diagram shows the endocrine glands and cells that are located throughout the body. The endocrine system organs shown from top to bottom include the pea size structure known as the _____[Blank 1] as well as the primary glandular structure of the endocrine system found enclosed within the _____[Blank 2] known as the _____[Blank 3]. The pituitary is located on the anterior side of the thalamus while the pineal gland is located on the posterior side of the thalamus. The _____[Blank 4] is a shield shaped cartilage that forms part of the laryngeal skeleton. This is a butterfly-shaped gland that wraps around the _____[Blank 5] within the neck. Four small, disc-shaped _____[Blank 6] are embedded into the posterior side of the thyroid. The _____[Blank 7] are located on top of the kidneys. The _____[Blank 8] is located at the center of the abdomen. In females, the _____[Blank 9] connects the two _____[Blank 10] a by two long, curved, tubes in the pelvic region. In males, the two _____[Blank 11] are in the scrotum below the penis. One the left side of the diagram and located in the center of the chest is the _____[Blank 12], a glandular structure responsible for the secretion of a hormone called thymosin.

Check your answers ¹

Activity source: Endocrine System Anatomy by Gisele Tuzon, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Endocrine System – Consultation Report (Text version)

Use the words below to fill in the consultation report:

- menstrual
- palpitations
- conjunctival
- antibodies
- side effects
- medications
- discontinue
- elevated

PATIENT NAME: Jane SMITH

AGE: 26

SEX: Female

DATE OF CONSULTATION: January 15, 2020

CONSULTING PHYSICIAN: Mary Johnstone, MD, Internal Medicine

REASON FOR CONSULTATION: Hyperthyroidism; Graves disease.

PATIENT NAME: Jane SMITH

AGE: 26

SEX: Female

DATE OF CONSULTATION: January 15, 2020

CONSULTING PHYSICIAN: Mary Johnstone, MD, Internal Medicine

REASON FOR CONSULTATION: Hyperthyroidism; Graves disease.

HISTORY: Around 2 months ago she started noticing _____[Blank 1] and peripheral tremor. She was feeling more anxious and edgy. She had a 10-pound weight loss despite eating well. She was having some heat intolerance and diarrhea, and her _____[Blank 2] cycles were irregular. She also noticed her eyes were different. She went to see her family doctor who did lab work and was found to have a TSH suppressed with a free T4 around 40 and free T3 around 10. She then had a 24-hour thyroid uptake and scan that was abnormal with a 24-hour of 70 and a diffuse pan with a homogeneous pattern percentage in keeping with Graves disease. Her TSI was _____[Blank 3] at around 30.

PHYSICAL EXAMINATION: On physical exam her blood pressure was 140/60, heart rate was 120 with regular rhythm. She had mild proptosis with no infection of the _____[Blank 4] area. Normal eye movement. No pretibial myxedema. She had a diffuse goiter of around 60 g with no murmur and no nodularity. No abnormal lymphadenopathies. There was a positional tremor. Her weight was 90 pounds.

SOCIAL HISTORY: Jane has no significant past medical history. She is finishing her fourth year in biological studies. She is also working on a part-time basis. She is not aware of a family history of thyroid disease. She is currently on no medications. She is a smoker, around 15 cigarettes a day. She rarely drinks alcohol. She denies marijuana use.

SUMMARY: Jane presents with Graves disease. She has hyperthyroidism positive _____[Blank 5] and an increased thyroid uptake and a thyroid scan in keeping with her condition.

We talked about different repair options. We discussed Tapazole versus radioactive iodine. We discussed the pros and cons of each treatment option. She preferred to start on Tapazole. We talked about the potential

_____ [Blank 6] of these medications including the risk of rash, increasing liver enzymes, and the rare risk of agranulocytosis. I explained to her that if she has a mild or high fever, she should have her CBC checked through the ER, and if there is evidence of a granulocytosis, she cannot resume Tapazole. Usually Tapazole is well tolerated.

PLAN: I have started her on Tapazole 30 mg, and she will repeat lab work in a month and see me at that point. I explained to her that usually 8-18 months of treatment are necessary. Response varies from patient to patient. Frequent levels are necessary to adjust the _____ [Blank 7] according to response.

If she has side effects to Tapazole or there is no response, or she is experiencing regular flares, then she should _____ [Blank 8] the use of the Tapazole. Other options such as radioactive iodine can be considered. I would not favour radioactive iodine in her case as she is a smoker and that she has had a mild ophthalmopathy. Radioactive iodine can worsen ophthalmopathy, therefore it should be avoided in smokers. We talked about the importance of discontinuing smoking as it can worsen the disease.

Mary Johnstone, MD, Internal Medicine

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDl) formatting standards.

Check your answers: ²

Activity source: Endocrine System – Consultation Report by Heather Scudder, from *Building a Medical Terminology Foundation* by Kimberlee Carter and Marie Rutherford, licensed under CC BY- 4.0. /Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

“Endocrine System – Consultation Report” (Text version)

Use the words below to fill in the consultation report:

- diabetes
- metabolic
- palpitations
- neuropathy
- congestive
- rhythm
- pulses
- diuretics
- sugars
- vascular disease
- edema

PATIENT NAME: Margaret JONES

SEX: Female

AGE: 56

DATE OF CONSULTATION: January 15, 2020

CONSULTING PHYSICIAN: Mary Johnstone, MD, Internal Medicine

REASON FOR CONSULTATION: Type 2 diabetes.

HISTORY: I saw Margaret as a follow up today in regards to poorly controlled type 2 _____[Blank 1]. She is reluctant to make any changes in her current medications. She is very afraid of side effects of all her medications. She has not been testing her blood sugar but is planning to start doing it again.

Unfortunately, Mary did not do lab work prior to seeing me. I do not have an updated lab work for at least 2 years. It is very difficult to assess her _____[Blank 2] control without any information.

She continues to be sedentary, but she tells me she has no chest pain or shortness of breath when doing the chores around the house or going up or down the stairs. She denies of orthopnea, ankle swelling, _____[Blank 3], presyncope or syncope.

PAST MEDICAL HISTORY

1. Type 2 diabetes diagnosed 2009. Advanced microvascular complications including non-proliferative retinopathy. Nephropathy with significant microalbuminuria. No _____[Blank 4]. Positive coronary artery disease and peripheral vascular disease. Poor control for several years.
2. Coronary artery disease. CABG 4 in 2019. LIMA to LAD SVG to OM and RCA. Grade 2 left ventricular function. Previous episodes of _____[Blank 5] heart failure preserved ejection fraction with regular admissions due to volume overload.
3. Hypertension.
4. Hypercholesterolemia.
5. Smoker.
6. Alcohol, 5-8 beers a week.
7. Obesity.
8. Peripheral vascular disease, femoral popliteal bypass in 2017.

MEDICATIONS

Aspirin 81 g q.d..

Bisoprolol 5 mg q.d.

Ramipril 20 mg q.d.

Rosuvastatin 20 mg q.d.

Invokana 300 mg q.d.

Tresiba 20 units q.d.

Metformin 1 b.i.d.

Ozempic 1 mg q.wk.

PHYSICAL EXAMINATION: On physical exam her weight was 100 kg. Blood pressure 160/70, heart rate 88/min. Sa and S2 were heard in 4 areas with regular _____[Blank 6]. There is a 2/6 systolic murmur best heard in aortic area with no radiation. Strong carotid pulses and radial _____[Blank 7]. JVP was 3 cm above sternal angle. Lungs were clear. There was bilateral leg _____[Blank 8] with venous changes in keeping with venous stasis dermatitis. Abdomen was soft, no evidence of ascites. No focal findings.

SUMMARY: Margaret has a history of poorly controlled type 2 diabetes and today is very difficult to assess her metabolic control as I do not have any information as she is not checking her blood _____[Blank 9] and has not had lab work for several years. She tells me she is compliant with her plan.

She also has a history of coronary artery disease and currently has no exertional symptoms. There is no evidence of significant volume overload, but she has a history of recurrent admissions due to congestive heart

failure preserved ejection fraction. She is currently not on _____[Blank 10] and I do not think that needs to be restarted. She should continue on the combination of ACE inhibitors, beta-blockers, antiplatelets, and high intensity setting therapy.

PLAN: I asked her to do lab work and come back to see me to reassess if her treatment plan is adequate. We talked about the importance of quitting smoking. Smoking is associated with increased risk of further coronary events and progression of her peripheral _____[Blank 11].

Mary Johnstone, MD, Internal Medicine

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ³

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Test Your Knowledge

Test your knowledge by answering the questions below:

Endocrine System Reinforcement Activity (Text version)

1. Endocrine glands _____[Blank 1].
 - a. secrete chemical messengers that travel in the bloodstream
 - b. secrete hormones that travel through a duct to the target organs
 - c. release neurotransmitters into the junction between two neurons (synaptic cleft)
 - d. include sebaceous glands and sweat glands
2. Chemical signaling that affects neighboring cells is called _____[Blank 2].
 - a. autocrine
 - b. paracrine
 - c. endocrine
 - d. neuron
3. Graves disease is _____[Blank 3].

- a. a condition marked by a disorder of the pancreas, resulting in high levels of glucose in the blood.
 - b. a condition marked by low levels of thyroid hormones that results in weight gain, cold sensitivity, and reduced mental activity.
 - c. a condition marked by a disorder of the thyroid gland, resulting in hyperthyroidism.
 - d. a condition marked by high levels of thyroid hormones that results in weight loss, profuse sweating, and increased heart rate.
4. In the endocrine system _____[Blank 4].
- a. the distance travelled by hormones is always short
 - b. hormones are secreted into the extracellular fluid
 - c. the response time is always fast
 - d. the glands release their secretions through ducts

Check your answers: ⁴

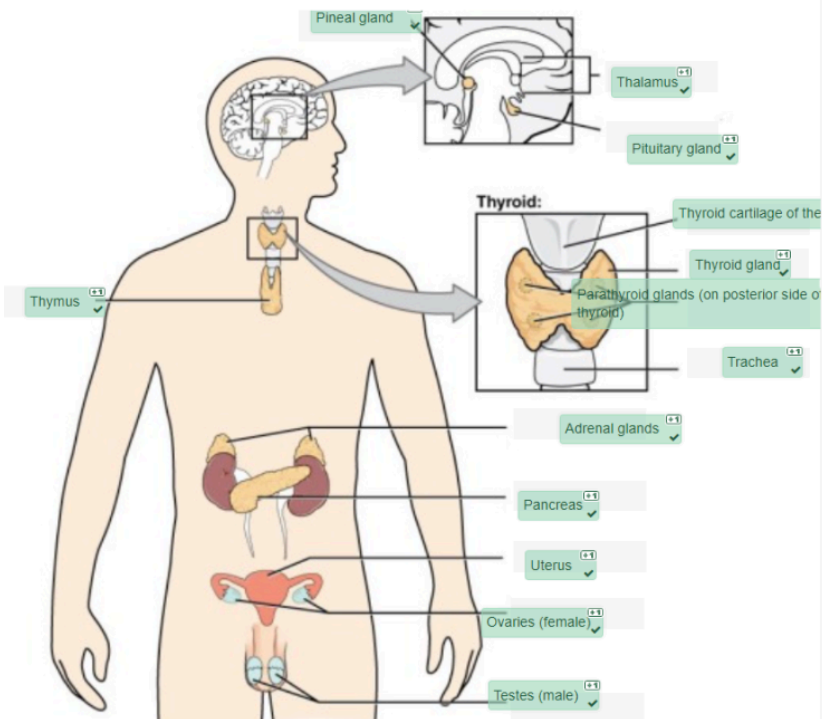
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Notes

Endocrine System Anatomy



1.

Check your answers: Endocrine System Diagram (Text Version) This diagram shows the endocrine glands and cells that are located throughout the body. The endocrine system organs shown from top to bottom include the pea size structure known as the **pineal gland** as well as the primary glandular structure of the endocrine system found enclosed within the **thalamus** known as the **pituitary gland**. The pituitary is located on the anterior side of the thalamus while the pineal gland is located on the posterior side of the thalamus. The **thyroid cartilage of the larynx** is a shield shaped cartilage that forms part of the laryngeal skeleton. The **thyroid gland** is a butterfly-shaped gland that wraps around the **trachea** within the neck. Four small, disc-shaped **parathyroid glands** are embedded into the posterior side of the thyroid. The **adrenal glands** are located on top of the kidneys. The **pancreas** is located at the center of the abdomen. In females, the **uterus** connects the two **ovaries** a by two long, curved, tubes in the pelvic region. In males, the two **testes** are in the scrotum below the penis. One the left side of the diagram and located in the center of the chest is the **thymus**, a glandular structure responsible for the secretion of a hormone called thymosin.

2. 1.palpitations, 2.menstrual, 3.elevated, 4.conjunctival, 5.antibodies, 6.side effects, 7.medications, 8.discontinue
3. 1.diabetes, 2.metabolic, 3.palpitations, 4.neuropathy, 5.congestive, 6.rhythm, 7.pulses, 8.edema, 9.sugars, 10.diuretics, 11.vascular disease
4. 1. a) secrete chemical messengers that travel in the bloodstream, 2. b) paracrine, 3. c) a condition marked by a disorder of the thyroid gland, resulting in hyperthyroidism, 4. b) hormones are secreted into the extracellular fluid,

CHAPTER 18: ONCOLOGY

Oncology

If you would like to review the textbook chapter content, please visit **Chapter 18: Oncology** [[New Tab](#)].

Learning Objectives

- Describe oncology and explore the physiology and activity of cancerous and non-cancerous growths
- Analyze, translate, and define medical terms and common abbreviations of oncology
- Practice the spelling and pronunciation of oncology terminology
- Identify the medical specialties associated with the oncology and explore common diseases, disorders, diagnostic tests, pharmacology, and procedures

Key Word Components

Identify meanings of key word components of oncology:

Prefixes

- ana- (up, apart)
- apo- (away from)
- dys- (abnormal; difficult)
- ecto- (outer)
- endo- (within)
- hyper- (excessive, increase)
- meta- (beyond, change)
- mutat/o- (to change)
- neo- (new)

Combining Forms

- Capsul/o- (to box)
- carcin/o- (cancer)
- miss/o- (to send back)
- mut/a- (change)
- path/o- (disease)
- nod/o- (node)
- onc/o- (tumour)
- sarc/o- (flesh)

Suffixes

- -carcinom (cancerous tumour of epithelial origin (internal or external lining of the body, i.e., skin, breast, colon))
- -genesis (condition of production, origin)
- -oma (tumour)
- -plasia (condition of formation)
- -plasm (formation)
- -sarcoma (connective tissue cancer, such as bones, tendons, cartilage, muscle, and fat)
- -stasis (standing still)

Pronouncing and Defining Commonly Abbreviated Oncology Terms

Practice pronouncing and defining these commonly abbreviated oncology terms:

- BCC- (basal cell carcinoma)
- BMT- (bone marrow transplant)
- BSE- (breast self-examination)
- Bx- (biopsy)
- CA- (cancer)
- CIS- (carcinoma in situ)
- FOBT- (fecal occult blood test)

- G - (grade)
- Mets- (metastases)
- SCC- (squamous cell carcinoma)
- TNM- (tumour-nodes-metastases)
- TSE- (testicular self-examination)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Test Your Knowledge

Test your knowledge by answering the questions below:

Oncology Reinforcement Activity (Text version)

1. A tumour _____[Blank 1].
 - a. is an injury of the nervous system.
 - b. is a function of the endocrine system.
 - c. is a medical specialty that primarily treats infections.
 - d. is an abnormal tissue mass that forms through uncontrolled cell growth and divides more than it should.
2. Some potential risk factors and causes of cancers include _____[Blank 2].

- a. a healthy lifestyle.
 - b. bacteria and viruses, diet, hormones, smoking, radiation, alcohol, environment, chemicals, and genetics.
 - c. a healthy and balanced diet.
 - d. regular exercise.
3. Cancerous growths or tumours can be diagnosed by _____[Blank 3].
- a. aggressive chemical treatments.
 - b. a biopsy to examine the lesion, growth or tumour under a microscope to determine the disease.
 - c. performing a series of radiation treatments.
 - d. administering oral antibiotics to the patient.
4. Lymphoma is _____[Blank 4].
- a. any tumour or a mass within the lymph node.
 - b. a type of cancer occurring in the endocrine system.
 - c. a type of cancer that primarily affects the blood.
 - d. a cancer that affects the bone marrow.

Check your answers:¹

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Notes

1. 1. d) is an abnormal tissue mass that forms through uncontrolled cell growth and divides more than it should, 2. b) bacteria and viruses, diet, hormones, smoking, radiation, alcohol, environment, chemicals, and genetics, 3. b) a biopsy to examine the lesion, growth or tumour under a microscope to determine the disease., 4. a) any tumour or a mass within the lymph node

CHAPTER 19: MENTAL HEALTH

Mental Health

If you would like to review the textbook chapter content, please visit [Chapter 19: Mental Health \[New Tab\]](#).

Learning Objectives

- Define mental health and mental illness
- Analyze, translate, and define medical terms and common abbreviations used with mental health
- Practice the spelling and pronunciation of mental health terminology
- Identify the medical specialties associated with the mental health and explore common diseases, disorders, pharmacology, diagnostic tests and procedures

Key Word Components

Identify meanings of key word components of mental health:

Prefixes

- acro- (heights, extremes, extremities)
- an- (no, not, without)
- bi- (two)
- dis- (apart)
- dys- (bad, difficult, painful, abnormal)
- eu- (good)
- ex- (outward)
- para- (near, beside, abnormal)

Combining Forms

- affect- (emotional reaction)
- agor/a- (marketplace)
- ambul/o- (to move)
- amnes/o- (forgetful)
- anxio/o- (fear, worry)
- aut/o- (self)
- centr/o- (centre)
- compuls/o- (drive, compel)
- cycl/o- (cycle)
- delus/o- (false belief, to cheat)
- ech/o- (sound)
- fab/o- (story)
- hallucinat/o- (to wander in mind)
- hedon/o- (pleasure)
- Iatr/o- (treatment)
- klept/o - (to steal, stealing)
- ment/o- (mind , do not confuse with chin)
- narc/o- (sleep, stupor)
- neur/o- (nerve)
- obsess/o- (besieged by thought)
- path/o- (disease)
- phil/o- (attraction)
- phor/o- (carry, bear, state)
- psych/o, thym/o, phren/o - (mind)
- pyr/o- (fire)
- schiz/o- (divide, split)
- soci/o- (society)
- somat/o- (body)
- somn/o- (sleep)

Suffixes

- -ia, -ism (condition)
- -iatrist (one who specializes in the treatment)
- -lepsy (seizure)
- -mania (condition of madness; frenzy; excessive excitement)
- -phobia (condition of fear)
- -thymia (condition of the mind)

- -orexia (appetite)

Pronouncing and Defining Commonly Abbreviated Mental Health Terms

Practice pronouncing and defining these commonly abbreviated mental health terms:

- ADL (Activities of Daily living)
- BD or BP (Bipolar disorder)
- BDD (Body dysmorphic disorder)
- CBT (Cognitive-behavioural therapy)
- DSM-5 (Diagnostic and Statistical Manual of Mental Health Disorders)
- DTs (Delirium tremens)
- ECT (Electroconvulsive therapy)
- GAD (generalized anxiety disorder)
- ICD (International Classification of Diseases)
- ID (intellectual disability)
- OCD (obsessive-compulsive disorder)
- ODD (oppositional defiant disorder)
- PD (panic disorder *also personality disorder)
- PTSD (post-traumatic stress disorder)
- SAD (seasonal affective disorder)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)

- **Anatomic** (terms related to body structure)

Test Your Knowledge

Test your knowledge by answering the questions below:

Mental Health Reinforcement Activity (Text version)

1. Psychology _____[Blank 1].
 - a. is a medical specialty focused on childhood diseases.
 - b. is the study of infectious diseases.
 - c. is the study of human behaviour and thought processes of the mind.
 - d. include sebaceous glands and sweat glands
2. The Diagnostic and Statistical Manual of Mental Disorders (DSM) _____[Blank 2].
 - a. is the resource used by healthcare professionals in much of the world to diagnose mental disorders.
 - b. is a manual related to nutrition and healthy eating.
 - c. a manual that provides statistical analysis of epidemiology.
 - d. is a guideline for the treatment of childhood cancer.
3. Anxiety is _____[Blank 3].
 - a. the state of feeling uneasiness, apprehension, worry or dread.
 - b. a treatment for common forms of skin cancer.
 - c. the feeling that one is going to vomit.
 - d. an infectious disease.
4. Withdrawal is _____[Blank 4].
 - a. a diagnostic test for colon cancer.
 - b. an unusual presentation of a skin infection.
 - c. a state where a person is attempting to come down from having a drug or alcohol over a long time.
 - d. a symptom related to an endocrine disorder.

Check your answers: ¹

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Notes

1. 1. c) is the study of human behaviour and thought processes of the mind, 2. a) is the resource used by healthcare professionals in much of the world to diagnose mental disorders, 3. a) the state of feeling uneasiness, apprehension, worry or dread, 4. c) a state where a person is attempting to come down from having a drug or alcohol over a long time.

WORD BANK

Terms are grouped alphabetically. Select the letter you need from the list below. Terms will include the definition and phonetic spelling.

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

Tip: Once you select a letter, you can hit CTRL+F on your keyboard to search for the exact term you want.

A

abdominal (ab-DOM-ĭ-năĭ)

Pertaining to the abdomen.

abdominocentesis (ab-dom-i-nō-sen-TĒ-sis):

Surgical puncture to aspirate fluid from the abdomen.

abdominoplasty (ab-DOM-i-nō-plas-tē):

Surgical repair of the abdomen.

ablation (a-BLĀ-shŏn):

Destruction of abnormal or excessive tissue by eroding, vaporizing or melting; Using extreme heat or extreme cold to destroy cells in part of the heart which were causing abnormal rhythms.

abortion (ă-BOR-shŏn):

Termination of a pregnancy before the fetus is viable.

abrasion (ă-BRĀ-zhŏn):

Scrape (by injury or mechanical process).

abruptio placentae (ă-BRŪP-shĕ-ŏ plă-SENT-ă):

Pre-mature separation of the placenta from the uterine wall.

abscess (AB-ses):

Localized collection of pus.

acanthosis nigricans (ak-an-THŌ-sis NĪ-grĭ-kăns):

A disorder that causes darkening and thickening of the skin on the neck, groin, underarms or skin folds.

acapnia (ă-KAP-nĕ-ă):

Condition of absence (less than normal level) of carbon dioxide (in the blood).

acne (AK-nĕ):

Clogging of pores, which can lead to infection and inflammation.

acoustic neuroma (ă-KOOS-tĭk noor-Ō-mă):

A benign tumor in the internal auditory canal.

acrochordons (ak-rŏ-KOR-don):

Skin tags, teardrop-sized pieces of skin that can be as large as raisins and are typically found in the armpits or neck area.

acromegaly (ak-rŏ-MEG-ă-lĕ):

Enlargement of the extremities.

acronym:

Term derived from the first letters of a phrase and are spoken as if they are a word on their own.

acquired immunodeficiency syndrome (AIDS) (ă-KWĪRD im-yŭ-nŏ-dĕ-FISH-ĕn-sĕ SĪN-drŏm):

Advanced, chronic immune system suppression caused by human immunodeficiency virus (HIV). infection.

active immunity (AK-tiv im-Ū-nīt-ē):

Immunity developed from an individual's own immune system.

acute inflammation (ā-KŪT in-flā-MĀ-shōn):

Inflammation occurring for a limited time period; rapidly developing.

adaptive immune response (ad-ap-TĪV i-MŪN ri-SPONS):

Relatively slow but very specific and effective immune response controlled by lymphocytes.

adenectomy (ad-ĕn-EK-tō-mē):

Excision of a gland.

adenitis (ad-ĕ-NĪT-is):

Inflammation of the gland.

adenoidectomy (ad-ĕ-noy-DEK-tō-mē):

Excision of the adenoids.

adenoiditis (ad-ĕ-noyd-ĪT-is):

Inflammation of the adenoids.

adenomegaly (ā-dĕn-ō-MEG-ā-lē):

Enlarged gland.

adenotome (AD-ĕ-nō-tōm):

Instrument used to cut the adenoids.

adhesion (ad-HĒ-zhōn):

Band of scar tissue that binds anatomic surfaces to each other.

adipocytes (AD-ĭ-pō-sīts):

Fat cells.

adipose (AD-ĭ-pōs):

Fat tissue.

adrenalectomy (ā-drē-nā-LEK-tō-mē):

Excision of the adrenal glands.

adrenalitis (ā-drē-nā-LĪT-is):

Inflammation of adrenal glands.

adrenocorticohyperplasia (ā-drē-nō-kor-tī-kō-hī-pĕr-PLĀ-zh(ē)-ā):

Excessive development of the adrenal cortex.

adrenomegaly (ā-drĕn-ō-MEG-ā-lē):

enlargement of one or both adrenal glands.

adrenopathy (ā-drĕn-ŌP-ā-thē):

Disease of the adrenal gland(s).

adventitial (ad-ven-TĪSH-al):

The outermost layer of the wall of a blood vessel.

afferent lymphatic vessels (AF-ĕ-rĕnt lim-FAT-ik VES-ĕls):

Lead into a lymph node.

afferent nerves (AF-ĕ-rĕnt nĕrvs):

Nerves that carry sensory signals (nerve impulses) toward the CNS from the periphery.

albinism (AL-bĭ-nizm):

Genetic disorder that affects the coloring of skin, hair, and eyes.

albuminuria (al-bū-mĭ-NOO-rĕ-ă):

Albumin in the urine.

allergens (AL-ĕr-jĕns):

Antigens that evoke type 1 hypersensitivity (allergy) responses.

Allergist (AL-ĕr-jĭst):

Specialist who studies and treats allergies.

allergy (AL-ĕr-jĕ):

Inflammatory response due to a hypersensitivity to a substance.

alpha-fetoprotein test (AFP) (AL-fă fĕt-ō-PRŌ-tĕn):

A maternal blood test to detect potential fetal abnormalities such as neural tube defects or multiple pregnancies; The AFP is taken between 14 and 19 weeks gestation.

alveolar (ăl-VĒ-ŏ-lăr):

Pertaining to the alveolus.

alveolar duc (ăl-VĒ-ŏ-lăr dŭkt):

A tube composed of smooth muscle and connective tissue.

alveolitis (al-vĕ-ŏ-LĪT-ĭs):

Inflammation of the alveoli.

amblyopia (am-blĕ-Ō-pĕ-ă):

Reduced vision in one eye. Associated with strabismus (lazy eye).

amenorrhea (ă-men-ŏ-RĒ-ă):

Absences of the flow of menses, no period; one of the first signs of pregnancy or menopause.

amniocentesis (am-nĕ-ŏ-sen-TĒ-sĭs):

Surgical puncture to remove a small amount of amniotic fluid through a needle via the abdomen. The fluid is tested for any potential fetal abnormalities.

amniochorial (am-nĕ-ŏ-KŌ-rĕ-ăl):

Pertaining to the amnion and chorion.

amnionitis (am-nĕ-ŏ-NĪ-tis):

Inflammation of the amnion.

amniorrhoea (am-nĕ-ŏ-RĒ-ă):

Discharge (escape) of amniotic fluid.

amniorrhexis (am-nē-ō-REK-sis):

Rupture of the amnion.

amniotomy (am-nē-OT-ō-mē):

Incision into the amnion to induce labor.

amphiarthrosis (am-fē-ar-THRŌ-sīs):

Joints with some movement.

ampulla (am-PU-lă):

A sac-like enlargement of a canal or duct.

anal (ĀN-ăl):

Pertaining to the anus.

anaphylactic shock (an-ă-fi-LAK-tik shok):

Also called anaphylaxis. An inhaled, ingested or injected (bee sting) allergen causes a significant drop in blood pressure along with contractions of smooth muscles of the airways.

anaphylaxis (an-ă-fi-LAK-sīs):

Exaggerated reaction to a previously encountered antigen may start out as mild reaction but can quickly become severe resulting in anaphylactic shock.

anatomical position (ăn-ă-TOM-ik pŏ-ZISH-ŏn):

That of the body standing upright, with the feet at shoulder width and parallel, toes forward. The upper limbs are held out to each side, and the palms of the hands face forward.

androgens (AN-drŏ-jĕns):

Hormones that affect growth and reproduction. Typically referred to as “male hormones,” however the female body produces small amounts of androgens as well.

anemia (ă-NĒ-mē-ă):

Reduction in number of erythrocytes.

anesthesia (an-ĕs-THĒ-zhă):

Without (loss of) feeling or sensation.

aneurysm (AN-yŭ-rizm):

Weakening of the wall of a blood vessel, causing it to thin and balloon out, and possibly eventually burst, resulting in internal bleeding.

angina pectoris (an-JĪ-nă):

Chest pain.

angiogram (AN-jĕ-ŏ-gram):

An x-ray of the coronary blood vessels using a special catheter and an injection of dye.

angiography (an-jĕ-OG-ră-fĕ):

Radiographic imaging of blood vessels.

angioma (an-jĕ-Ō-mă):

Tumor composed of blood vessels.

angioplasty (AN-jē-ō-plas-tē):

A balloon-tip catheter is fed through a blood vessel up to the site of the narrowing, the balloon is inflated to re-open the artery. A stent is sometimes placed at the site to reinforce the arterial wall and to prevent re-occlusion.

angioscope (AN-jē-ō-skōp):

Instrument used for visual examination of blood vessels.

angiосcopy (an-jē-OS-kō-pē):

Visual examination of blood vessels.

angiostenosis (an-jē-ō-stē-NŌ-sīs):

Narrowing of a blood vessel.

anisocoria (an-ī-sō-KŌR-ē-ā):

Condition of absence of equal pupil (size).

ankylosis (ang-kī-LŌ-sīs):

Abnormal condition of stiffness.

anoplasty (Ā-nō-plas-tē):

Surgical repair of the anus.

anorchism (ă-NOR-kī-dizm):

State of absence of testis.

anosmia (a-NOZ-mē-ă):

Without smell/inability to smell.

anoxia (ă-NOK-sē-ă):

Condition of absence (deficiency) of oxygen.

antagonistic (an-TAG-ō-nīs-tic):

In opposition to each other.

antepartum (ăn-tē-PĀR-túm):

Before childbirth referencing the mother.

anterior (or ventral) (an-TĒR-ē-ōr):

Describes the front or direction toward the front of the body.

anteriorly (an-TĒR-ē-ōr-lē):

Pertaining to front.

anti-B antibodies (ANT-i-bod-ēs):

Proteins that will mount an immune response against B antigens.

anti-virals (ant-i-VI-rāl):

Treatments that work effectively against a virus.

antiandrogens (ant-ē-AN-drō-jěns):

A group of medications that counteract the effects of male hormones.

antibiotics (ant-i-bī-OT-iks):

Medications that stop bacterial infections.

antibodies (ANT-i-bod-ēs):

Proteins produced by B lymphocytes in response to a non-self antigen.

antibody (ANT-i-bod-ē):

Antigen-specific protein secreted by plasma cells, immunoglobulin.

antigen (ANT-i-jěn):

Molecule recognized by the receptors of b and t lymphocytes.

antigens (ANT-i-jěns):

A substance that provokes an immune response. This happens because the immune system sees the antigen as foreign, or 'non-self' (does not belong in that body).

antihypertensives (ant-i-hī-pěr-TEN-siv):

Class of medications used to treat high blood pressure.

antiretrovirals (ant-i-re-trō-VĪ-rāls):

Treatment that works against the virus replication.

antrectomy (an-TREK-tō-mē):

Excision of the antrum (of the stomach).

anuria (ă-NOOR-ē-ă):

Absence of urine.

aortic stenosis (ā-OR-tĭk stě-NŌ-sĭs):

Narrowing, pertaining to the aorta.

aortogram (ā-OR-tō-grām):

Radiographic image of the aorta.

Apgar score (AP-gar skōr):

Evaluation of a newborn's physical condition within one to five minutes after birth.

aphakia (ă-FĀ-kē-ă):

Condition of no lens.

aphasia (ă-FĀ-zh(ē-ă):

Loss of language function.

aphonia (ā-FŌ-nē-ă):

Condition of absence of voice.

apical (AP-ĭ-kāl):

Relating to or denoting an apex.

apnea (ap-NĒ-ă):

Absence of breathing.

apocrine sweat gland (AP-ō-krěn swet gland):

A type of gland that is found in the skin, breast, eyelid, and ear.

apoptosis (ap-ōp-TŌ-sĭs):

Programmed cell death.

appendectomy (ap-ĕn-DEK-tō-mē):

Excision of the appendix.

appendicitis (ă-pen-dī-SĪT-ĭs):

Inflammation of the appendix.

appendicular skeleton (ap-ĕn-DIK-yŭ-lār SKEL-ĕt-ŏn):

Consists of all the bones in the upper and lower limbs.

arachnoid mater (ă-RAK-noyd MĀT-ĕr):

Middle layer of the meninges named for the spider-web-like trabeculae that extend between it and the pia mater.

arrhythmias (ă-RITH-mē-ă):

Absence of a regular heart rhythm.

arterial blood gas (ar-TĒR-ĕ-ăl blŭd gas):

This test measures blood pH, oxygen and CO₂ levels in a sample of arterial blood, usually taken from the wrist.

arteries (ART-ĕ-rĕs):

Blood vessels that transport blood away from the heart.

arteriogram (ar-TĒR-ĕ-ŏ-gram):

Radiographic image of an artery.

arterioles (ar-TĒR-ĕ-ŏl-es):

A very small artery that leads to a capillary.

arteriosclerosis (ar-tĕr-ĕ-ŏ-sklĕ-RŌ-sĭs):

Hardening of arteries.

arthralgia (ar-THRĀL-j(ĕ-)ă):

Joint pain.

arthritis (ar-THRĪT-ĭs):

Inflammation of the joints.

arthrocentesis (ar-thrŏ-sen-TĒ-sĭs):

Surgical puncture to aspirate fluid from a joint.

arthroclasia (ar-thrŏ-KLĀ-zh(ĕ-)ă):

Surgical breaking of a joint.

arthrodesis (ar-THROD-ĕ-sĭs):

Surgical fixation of a joint.

arthrography (ar-THROG-ră-fĕ):

Process of recording a joint.

arthroplasty (AR-thrŏ-plas-tĕ):

Surgical repair of a joint.

arthroscopy (ar-THROS-kŏ-pĕ):

Process of viewing a joint.

articulations (ar-tik-yŭ-LĀ-shŏn):

also known as joints, where bones meet bones or where bones meet cartilage

artificial insemination (art-ĭ-FISH-Āl in-sem-ĭ-NĀ-shŏn):

The medical procedure of injecting concentrated sperm into the vagina or uterus.

ascites (ă-SĪT-ēz):

Abnormal intraperitoneal accumulation of fluid with large amount of proteins and electrolytes.

aspermia (ā-SPĚR-mē-ă):

Condition of without sperm.

asphyxia (ăs-FIK-sē-ă):

Deprivation of oxygen to tissues, suffocation.

aspirate (AS-pĭ-rāt):

Suction of fluid, inhalation of fluid.

asthma (AZ-mă):

Chronic condition characterized by inflammation, edema of the airway, and bronchospasms which can inhibit air from entering the lungs.

astigmatism (Ast) (ă-STIG-mă-tizm):

Blurry vision due to irregular curvature of the cornea or lens.

astrocyte (AS-trŏ-sīt):

Glial cell type of the CNS that provides support for neurons and maintains the blood-brain barrier.

asymptomatic (ă-simp-tŏ-MAT-ik):

Pertaining to without symptoms.

atelectasis (at-ĕl-EK-tă-sĭs):

Incomplete expansion.

atherectomy (ath-ĕr-EK-tŏ-mē):

Excision of fatty plaque.

atherosclerosis (ath-ĕ-rŏ-sklĕ-RŌ-sĭs):

A hardening of the arteries that involves the accumulation of plaque.

atom (AT-ŏm):

Smallest unit of pure substances (elements); made up of subatomic particles such as the proton, electron, and neutron.

atrioventricular (AV) (ă-trĕ-ŏ-ven-TRIK-yŭ-lăr):

The area of the heart where the atria and ventricles meet.

atrioventricular valves (ă-trĕ-ŏ-ven-TRIK-yŭ-lăr valv):

Mitral (bicuspid) valve allows blood to flow from left atrium to left ventricle, tricuspid valve allows blood to flow from right atrium to right ventricle.

audiogram (OD-ĕ-ŏ-gram):

Graphic record (radiographic image) of hearing.

audiologist (od-ē-OL-ō-jīst):

Specialist who studies and treats the hearing.

audiology (od-ē-OL-ō-jē):

Study of the hearing.

audiometer (od-ē-OM-ēt-ēr):

Instrument used to measure hearing.

audiometry (od-ē-OM-ē-trē):

Measuring hearing.

aural (OR-āl):

Pertaining to the ear.

auscultation (os-kūl-TĀ-shŏn):

Listening to the heart using a stethoscope.

autocrine (OT-ō-krin):

Chemical signal that elicits a response in the same cell that secreted it.

autoimmune disease (OT-ō-im-yūn diz-ĒZ):

A disease caused by the inability for the body to distinguish its own (self) cells from foreign substances, producing antibodies that attacks its own tissues.

autoinoculation (ot-ō-in-ok-yŭ-LĀ-shŏn):

Self inoculation.

autonomic (ot-ō-NOM-ik):

Unconsciously regulates.

autonomic nervous system (ANS) (ot-ō-NOM-ik NĒR-vŭs SIS-tēm):

Functional division of the nervous system that is responsible for homeostatic reflexes that coordinate control of cardiac and smooth muscle, as well as glandular tissue.

avascular (ă-VĀS-kŭ-lār):

Without blood vessels.

axial skeleton (AK-sē-āl SKEL-ēt-ŏn):

Forms the vertical, central axis of the body and includes all bones of the head, neck, chest, and back.

axilla (ak-SIL-ă):

The armpit.

axon (AK-son):

Single process of the neuron that carries an electrical signal (action potential) away from the cell body toward a target cell.

axon hillock (AK-son HĪL-ŏk):

Tapering of the neuron cell body that gives rise to the axon.

axon segment (AK-son Seg-mēnt):

Single stretch of the axon insulated by myelin and bounded by nodes of Ranvier at either end (except for the first, which is after the initial segment, and the last, which is followed by the axon terminal).

axon terminal (AK-son TĚR-mĭ-nāl):

End of the axon, where there are usually several branches extending toward the target cell.

axoplasm (AK-sō-plazm):

Cytoplasm of an axon, which is different in composition than the cytoplasm of the neuronal cell body.

azoospermia (ā-zō-ō-SPĚR-mĕ-ă):

Absence of viable sperm in the semen.

azotemia (ā-zō-TĚ-mĕ-ă):

Urea in the blood.

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B

B cells (B sels):

Lymphocytes that act by differentiating into an antibody-secreting plasma cell.

Babinski sign (bă-BIN-skē sīn):

Dorsiflexion of the foot with extension and splaying of the toes in response to the plantar reflex, normally suppressed by corticospinal input.

bacteria, bacterium (bak-TĒR-ē-ŭm):

Single-celled microorganism that reproduces by cell division and may cause infection by invading body tissue.

balanitis (bal-ă-NĪT-īs):

Inflammation of the glans penis.

balanoplasty (BAL-ă-nō-plaās-tē):

Surgical repair of the glans penis.

balanorrhoea (BAL-ă-nō-RĒ-ă):

Discharge from the glans penis.

barrier defenses (BAR-ē-ēr dė-FEN-s):

Antipathogen defenses deriving from a barrier that physically prevents pathogens from entering the body to establish an infection.

Bartholin's glands (BAR-tō-līns glāns):

Responsible to secrete mucus to keep the vestibular area moist.

basal cell carcinoma (BĀ-sāl sel kar-sīn-Ō-ma):

Form of cancer that affects the mitotically active stem cells in the stratum basale of the epidermis.

benign (bē-NĪN):

Noncancerous, harmless.

benign prostatic hyperplasia (BPH) (bē-NĪN prōs-TĀT-īk hī-pēr-PLĀ-zh(ē-ă):

Excessive development pertaining to the prostate gland.

bicarbonate (bī-KĀR-bō-nāt):

A by-product of the body's metabolism.

bilateral (bī-LAT-ē-rāl):

Pertaining to both sides.

binocular (bīn-ŌK-ŭ-lār):

Pertaining to both eyes.

biopsy (BĪ-op-sē):

View of life (removal of living tissue to be viewed under a microscope).

bipolar (bī-PŌL-ār):

Shape of a neuron with two processes extending from the neuron cell body—the axon and one dendrite.

blepharitis (blĕf-ār-Ī-tīs):

Inflammation of eyelids.

blepharoplasty (BLĕF-ă-rō-plās-tē):

Surgical repair of the eyelid.

blepharoptosis (BLĕF-ă-rōp-TŌ-sīs):

Drooping of the eyelid.

blood-brain barrier (BBB) (blūd- brān BAR-ē-ēr):

Physiological barrier between the circulatory system and the central nervous system that establishes a privileged blood supply, restricting the flow of substances into the CNS.

bone marrow (bōn MAR-ō):

Tissue found inside bones, the site of all blood cell differentiation and maturation of b lymphocytes.

brachial artery (BRĀ-kē-āl ART-ĕ-rē):

Large artery in the upper arm near the biceps muscle.

bradycardia (brād-i-KARD-ē-ă):

Pertaining to a slow heart (rate).

bradykinesia (brād-ē-kĭ-NĒ-sē-ă):

Condition of slow movement.

brain (brān):

The large organ of the central nervous system composed of white and gray matter, contained within the cranium and continuous with the spinal cord.

brain stem (brān stem):

Region of the adult brain that includes the midbrain, pons, and medulla oblongata and develops from the mesencephalon, metencephalon, and myelencephalon of the embryonic brain.

breast cancer (KAN-sēr):

Malignant tumor of the breast.

breech (brĕch):

The position of the fetus is feet first. Ideally, the position of the fetus should be headfirst for a safer delivery.

Broca's area (brō-KAS AR-ē-ă):

Region of the frontal lobe associated with the motor commands necessary for speech production and located only in the cerebral hemisphere responsible for language production, which is the left side in approximately 95 percent of the population.

Brodmann's areas (BRŌD-mans AR-ē-ă):

Mapping of regions of the cerebral cortex based on microscopic anatomy that relates specific areas to functional differences, as described by Brodmann in the early 1900s.

bronchitis (brong-KĪT-īs):

Inflammation of the bronchus.

bronchoalveolar (brong-kō-al-VĒ-ō-lār):

Pertaining to the bronchi and alveoli.

bronchodilators (BRONG-kō-dī-LĀT-ōrs):

Substance that dilates the bronchi and bronchioles.

bronchogenic carcinoma (brōng-kō-JĔN-ĭk kar-sĭn-Ō-mă):

Cancerous tumor originating in a bronchus.

bronchopneumonia (brong-kō-noo-MŌ-nē-ă):

Diseased state of bronchi and lungs.

bronchoscope (BRŌNG-kō-skōp):

Instrument used for visual examination of the bronchi.

bronchoscopy (bron-KOS-kō-pē):

Visual examination of the bronchi.

bronchospasm (BRŌNG-kō-spāzm):

Spasmodic contraction of the bronchi.

bronchus-associated lymphoid tissue (balt) (BRONG-kūs ä-sō-s(h)ĕ-ĀTE LIM-foyd TISH-oo):

Lymphoid nodule associated with the respiratory tract.

bruit (brwē):

Abnormal blowing, swishing heart sound heard on auscultation.

bulbourethral glands:

Glands that secrete a lubricating mucus that cleans and lubricates the urethra prior to and during ejaculation.

bursectomy (bŭr-SĔK-tō-mē):

Excision of bursa.

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C

Caesarian section (C/S, c-section) (si-ZAR-ē-ān SEK-shōn):

Delivery of the fetus through an abdominal incision.

calyces (KĀ-lī-sēz):

A cuplike cavity or structure.

cancer (KAN-sēr):

A process where abnormal cells in the body divide uncontrollably.

capillary (KAP-ī-ler-ē):

A microscopic channel that supplies blood to the tissues through perfusion.

capnometer (kăp-NŌM-ē-tēr):

Instrument used to measure carbon dioxide.

carbohydrates (kār-bō-HĪ-drāts):

The sugars, starches and fibers found in fruits, grains, vegetables and milk products.

carcinogenic (KARS-īn-ō-JEN):

Causing cancer.

cardiac (KĀR-dē-āk):

Pertaining to the heart.

cardiac muscle (KĀR-dē-āk MŪS-ēl):

The heart muscle also known as the myocardium. Its appearance is similar to skeletal muscle. It pumps blood and gives the heart beat.

cardiac notch (KĀR-dē-āk noch):

The cardiac notch is an indentation on the surface of the left lung.

cardiac output (KĀR-dē-āk OWT-put):

Cardiac output is the measurement of blood flow from the heart through the ventricles, and is usually measured in liters per minute. Any factor that causes cardiac output to increase, by elevating heart rate or stroke volume or both, will elevate blood pressure and promote blood flow.

cardiac tamponade (KĀR-dē-āk tam-pō-NĀD):

The pericardial sac surrounding the heart has filled with blood or other fluid and the resulting pressure is preventing the heart from beating effectively.

cardiac troponin (KĀR-dē-āk TRŌ-pō-nīn):

The regulatory protein for muscle contraction.

cardiogenic (kār-dē-ō-JĒN-īk):

Originating in the heart.

Cardiologist (kār-dē-ŌL-ō-jīst):

A physician who studies and treats diseases of the heart.

cardiology (kār-dē-ōl'ō-jē):

Study of the heart.

cardiomegaly (kār-dē-ō-MĚG-ā-lē):

Enlarged heart.

cardiomyopathy (kard-ē-ō-mī-OP-ā-thē):

Disease of the heart muscle.

carina (kā-RĪ-nā):

The carina is a ridge of cartilage that separates the two main bronchi.

carotid artery (kā-ROT-īd ART-ē-rē):

A large artery in the neck.

carpal (KĀR-pāl):

Pertaining to carpal (wrist).

carpectomy (kār-PĚK-tō-mē):

Excision of a carpal (wrist).

cataract (KAT-ā-rakt):

Abnormal progressive disease of lens characterized by lack of transparency or cloudiness.

cauda equina (KOWD-ā ek-WĚ-nā):

Bundle of spinal nerve roots that descend from the lower spinal cord below the first lumbar vertebra and lie within the vertebral cavity; has the appearance of a horse's tail.

caudate (KAW-dāt):

Nucleus deep in the cerebrum that is part of the basal nuclei; along with the putamen, it is part of the striatum.

cauterize (KAW-tēr-īz):

To burn tissues by various means with the intent to destroy damaged tissues, prevent infections or coagulate blood vessels.

CD4 T cells:

CD4 is the receptor that HIV uses to get inside T cells and reproduce. CD4+ helper T cells play an important role in T cell immune responses and antibody responses.

celiac disease (SĚ-lē-āk diz-ĚZ'):

Inflammation of the intestines caused by exposure to gluten.

celiotomy (sē-lē-ŌT-ō-mē):

Incision into the abdominal cavity.

cell (sel):

Smallest independently functioning unit of a living organism.

cellulitis (sel-yŭ-LĪT-īs):

Bacterial infection of the skin and subcutaneous tissue, characterized by redness, pain, heat, and swelling.

central nervous system (CNS) (SĚN-trāl NĚR-vŭs SIS-tēm):

Anatomical division of the nervous system located within the cranial and vertebral cavities, namely the brain and spinal cord.

central sulcus (SĚN-trāl SŮL-kús):

Surface landmark of the cerebral cortex that marks the boundary between the frontal and parietal lobes.

centrifuged (sĕn-TRĪF-ŭ-ged):

A centrifuge is a common piece of laboratory equipment used to spin test tubes at a high speed in order to separate components in a liquid by weight.

cephalgia (sĕf-ĀL-jĕ-ă):

Pain in the head (headache).

cephalic presentation (sĕ-FAL-ĭk prĕ-zen-TĀ-shŏn):

Birth position in which any part of the head emerges first.

cephalic version (sĕ-FAL-ĭk VĚR-zhŏn):

Pertaining to turning the head; this procedure is done on the fetus when they are in the head-down position.

cephalopelvic disproportion (sĕf-ă-lŏ-PĚL-vĭk dis-prŏ-POR-shŏn):

A condition where the infant's head is larger than the pelvic outlet and therefore will require a c-section.

cerclage (ser-KLAZH):

A suture inserted into the cervix to prevent dilation and prevention miscarriage. The suture is removed when the fetus is full-term and allows the vaginal delivery to proceed.

cerebellitis (sĕr-ĕ-bĕl-Ī-tĭs):

Inflammation of the cerebellum.

cerebellum (sĕr-ĕ-BĚL-ŭm):

Region of the adult brain connected primarily to the pons that developed from the metencephalon (along with the pons) and is largely responsible for comparing information from the cerebrum with sensory feedback from the periphery through the spinal cord.

cerebral (SĚR-ă-brĭl, să-RĚ):

Pertaining to the brain.

cerebral angiography (SĚR-ă-brĭl, să-RĚ an-jĕ-OG-ră-fĕ):

Process of recording (blood) vessel pertaining to the cerebrum.

cerebral cortex (SĚR-ă-brĭl, să-RĚ KOR-teks):

Outer gray matter covering the forebrain, marked by wrinkles and folds known as gyri and sulci.

cerebral hemisphere (SĚR-ă-brĭl, să-RĚ HEM-ĭ-sfĕr):

One half of the bilaterally symmetrical cerebrum.

cerebral thrombosis (SĚR-ă-brĭl, să-RĚ throm-bŏ'sis):

Abnormal condition of blood clot pertaining to the cerebrum (blood clot in a blood vessel in the brain).

cerebrospinal fluid (CSF) (sĕr-ĕ-brŏ-SPĪ-nāl FLOO-ĭd):

Circulatory medium within the CNS that is produced by ependymal cells in the choroid plexus filtering the blood.

cerebrum (SĚR-ĕ-brŭm):

Region of the adult brain that develops from the telencephalon and is responsible for higher neurological functions such as memory, emotion, and consciousness.

cervical cancer (KAN-sēr):

Malignant tumor of the cervix, which progresses from cervical dysplasia to carcinoma. Its cause is linked to human papillomavirus (HPV) infection.

cervicitis (sēr-vī-SĪ-tīs):

Inflammation of the cervix.

cervix (SĔR-viks):

Narrow lower portion of the uterus.

cessation (ses-SĀ-shŭn):

Stop or stopping.

cheilorrhaphy (kī-LOR-ă-fē):

Suturing of the lip.

chemokine (kēm-ō-KĪN):

Soluble, long-range, cell-to-cell communication molecule.

chemoreceptors (kē-mō-rē-SEP-tór):

Cells that sense changes in chemical levels.

chemotaxis (kē-mō-TĀK-sīs):

Movement in response to chemicals; a phenomenon in which injured or infected cells and nearby leukocytes emit the equivalent of a chemical “911” call, attracting more leukocytes to the site.

chlamydia (klă-MID-ē-ă):

Sexually transmitted disease caused by a very small parasitic bacterium.

cholangiogram (kō-lăn-jē-Ō-gram):

Radiographic image of the bile duct.

cholangiography (kō-lăn-jē-OG-ră-fē):

Radiographic imaging of the bile duct.

cholangioma (kō-lăn-jē-Ō-mă):

Tumor of the bile duct.

cholecystectomy (kō-lě-sis-TEK-tō-mē):

Excision of the gallbladder to remove stones.

cholecystitis (kō-lě-sis-TĪT-īs):

Inflammation of the gallbladder.

choledocholithiasis (kō-LED-ō-kō-lī-THĪ-ă-sīs):

Condition of stones in the common bile duct.

choledocholithotomy (kō-LED-ō-kō-lī-THŌT-ō-mē):

Incision into the common bile duct to remove stones.

cholelithiasis (kō-li-lith-Ī-ă-sīs):

Condition of gallstones.

chondrectomy (kŏn-DRĚK-tŏ-mĕ):

Excision of cartilage.

chondromalacia (kon-drŏ-mă-LĀ-sh(ĕ-)ă):

Softening of cartilage.

chondroplasty (KŌN-drŏ-plăs-tĕ):

Surgical repair of cartilage.

chorioamnionitis (kŏr-ĕ-ŏ-am-nĕ-ŏ-NĪT-ĭs):

Inflammation of the chorion and amnion.

choriocarcinoma (kŏr-ĕ-ŏ-kar-sĭn-Ō-mă):

Cancerous tumor of the chorion.

choroid plexus (KŌ-royd PLEKS-ŭs):

Specialized structure containing ependymal cells that line blood capillaries and filter blood to produce CSF in the four ventricles of the brain.

chorionic villus sampling (KŌrĕ-onic VĪL-ŭs SAM-pling):

A small piece of placenta is taken and tested to determine potential for birth defects.

chronic (KRON-ĭk):

A condition that lasts over a long time with periods of exacerbation and periods of remission.

chronic inflammation (KRON-ĭk in-flă-MĀ-shŏn):

Inflammation occurring for long periods of time.

chronic obstructive pulmonary disease:

Term used to represent a number of respiratory diseases including chronic bronchitis and emphysema.

chyle (kĭl):

Lipid-rich lymph inside the lymphatic capillaries of the small intestine.

cilia (SIL-ĕ-ă):

Tiny hairline processes.

circumcision (sĭr-kŭm-SIZH-ŏn):

Surgical removal of the prepuce (foreskin).

cirrhosis (sĭ-RŌ-sĭs):

Chronic degenerative disease of the liver.

cisterna chyli (sis-TĚR-nă kĭ-lĭ):

Bag-like vessel that forms the beginning of the thoracic duct.

clavicular (klă-VĪK-ŭ-lăr):

Pertaining to the clavicle.

clubbing of the fingers and toes:

Broadening of the nails and exaggerated curvature of the nails.

cochlear (KOK-lĕ-ăr):

Pertaining to the cochlea.

cochlear implant (KOK-lē-ă IM-plant):

Pertaining to the cochlear implant.

coitus (KŌ-ĭ-tūs):

Sexual intercourse between male and female.

colectomy (kō-LEK-tō-mē):

Excision of the colon.

colitis (kō-LĪT-ĭs):

Inflammation of the colon.

colonoscope (kō-LŌN-ō-skōp):

Instrument used to view the colon.

colonoscopy (kō-lō-NOS-kō-pē):

Process of viewing the colon.

colorectal (kō-lō-REK-tāl):

Pertaining to the colon and rectum.

colostomy (kō-LOS-tō-mē):

Creation of an artificial opening in the colon.

colostrum (kō-LOS-trūm):

Thin, milky fluid secreted by the breast during pregnancy and the first few days after delivery.

colpocleisis (kol-pō-KLĪ-sĭs):

Surgical closure of the vagina.

colpoperineorrhaphy (kol-pō-per-ĭ-nē-OR-ă-fē):

Suturing of the vagina and the perineum.

colpoplasty (KŌL-pō-plās-tē):

Surgical repair of the vagina.

colporrhaphy (kol-POR-ă-fē):

Suturing of (a tear in) the vagina.

colposcope (KŌL-pō-skōp):

Instrument used to view the vulva.

colposcopy (kōl-PŌS-kō-pē):

Process of viewing the vagina.

combining form:

A word root with a combining form vowel.

combining form vowel:

Vowel that is used to join word parts and to ease pronunciation. The most common combining form vowel is an “o” but sometimes it is an “i” or an “e”.

complement (KOM-plē-mēnt):

Enzymatic cascade of constitutive blood proteins that have antipathogen effects, including the direct killing of

bacteria.

compliance (kǒm-PLĪ-ǎns):

The ability of the blood vessels to dilate and constrict as needed.

computerized tomography (CT) (tō-MOG-rǎ-fē):

A special 3-dimensional x-ray.

condom (KON-dǒm):

Sheath (cover) for penis worn during coitus to prevent conception and spread of sexually transmitted infection.

conducting zone (KŌN-dŭk-TĪNG zōn):

The major functions of the conducting zone are to provide a route for incoming and outgoing air, remove debris and pathogens from the incoming air, and warm and humidify the incoming air. Several structures within the conducting zone perform other functions as well. The epithelium of the nasal passages, for example, is essential to sensing odors, and the bronchial epithelium that lines the lungs can metabolize some airborne carcinogens.

congenital (kǒn-JĒN-ĭ-tǎl):

Present at birth.

congenital anomaly (kǒn-JĒN-ĭ-tǎl ǎ-NOM-ǎ-lē):

Abnormality present at birth.

conjunctivitis (kǒn-jŭnk-tĭ-VĪT-ĭs):

Inflammation of the conjunctiva.

connective tissue membrane (kǒ-NEK-tiv TISH-oo MEM-brān):

Tissue membrane formed solely from connective tissue; encapsulates organs and lines movable joints.

contraception (kon-trǎ-SEP-shōn): Intentional prevention of conception (pregnancy).

contusion (kǒn-TOO-zhǒn):

Bruise.

convex (KŌN-vĕks):

Curved outwards.

corneal (KOR-nē-ǎ):

Pertaining to the cornea.

coronary artery bypass graft (KOR-ō-ner-ē ART-ē-rē bĭ-pās graft):

In a coronary bypass procedure, a non-vital superficial vessel from another part of the body (often the great saphenous vein) or a synthetic vessel is inserted to create a path around the blocked area of a coronary artery.

coronary heart disease (KOR-ō-ner-ē hart diz-ĒZ):

The blood vessels that supply blood to the myocardium become hardened and narrowed, impairing the delivery of oxygen to the heart muscle.

corpus callosum (KOR-pŭs kǎ-LŌ-sŭm):

Large white matter structure that connects the right and left cerebral hemispheres.

corpus cavernosum (KOR-pŭs kǎ-vĕr-nō-SŌM):

Either of two columns of erectile tissue in the penis that fill with blood during an erection.

corpus spongiosum (KOR-pūs spŭn"jē-ō-SŌM):

(Plural = corpora cavernosa) column of erectile tissue in the penis that fills with blood during an erection and surrounds the penile urethra on the ventral portion of the penis.

cortical (KOR-tī-kāl):

Pertaining to the cortex.

corticoid (KOR-tī-koyd):

Resembling the cortex.

costectomy (kōs-TĚK-tō-mē):

Excision of rib(s).

costochondral (kōs-tō-KŌN-drāl):

Pertaining to ribs and cartilage.

cranial (KRĀ-nē-āl):

Pertaining to the cranium.

cranial cavity (KRĀ-nē-āl kah-vi-tē):

The space formed inside the skull that the brain occupies.

craniocerebral (krā-nē-ō-sēr-Ē-brāl):

Pertaining to the cranium and cerebrum.

cranioplasty (KRĀ-nē-ō-plās-tē):

Surgical repair of the cranium.

cranioschisis (krā-nē-ŌS-kī-sīs):

Fissure of the cranium.

craniotomy (krā-nē-ŌT-ō-mē):

Incision into the cranium.

creatine kinase MB (KRĒ-ā-tīn KĪN-ās):

An enzyme that catalyzes the conversion of creatine to phosphocreatine, consuming ATP.

Crohn's disease (krōnz diz-ĒZ'):

A type of inflammatory bowel disease.

cryoretinopexy:

Surgical fixation of the retina using extreme cold.

cryptorchidism (krip-TOR-kīd):

State of hidden testis.

crypts (kripts):

A depression, or pit in an otherwise fairly flat surface.

CT colonography (CT kō-lo-NO-grā-fē):

Radiographic imaging of the colon using computed tomography.

CT myelography (CT mī-ē-LŌG-rā-fē):

Process of recording the spinal cord with computed tomography.

cutaneous membrane (kū-TĀ-nē-ūs MEM-brān):

Epithelial membrane; skin.

cyanosis (sī-ă-NŌ-sīs):

Abnormal condition of blue (bluish color, lips and nail beds). Typically caused by low oxygenation.

cyanotic (sī-ăn-ŌT-ĭk):

Pertaining to abnormal color of blue (bluish color, lips and nail beds) caused by deoxygenation.

cyst (sist):

Closed sac containing fluid or semisolid material.

cystectomy (sīs-TĚK-tō-mē): Excision of the bladder.

cystitis (sis-TĪT-īs):

Inflammation of the bladder.

cystocele (SIS-tō-sēl):

Protrusion of the bladder.

cystogram (SĪS-tō-grām):

Radiographic image of the bladder.

cystography (sīs-TŌG-ră-fē):

Radiographic imaging of the bladder.

cystolith (SĪS-tō-lĭth):

Stone(s) in the bladder.

cystolithotomy (sīs-tō-lĭ-THŌ-tō-mē):

Incision into the bladder to remove stone(s).

cystorrhaphy (sist-OR-ă-fē):

Suturing the bladder.

cystoscope (SIST-ŏ-skōp):

Instrument used for visual examination of the bladder.

cystostomy (sis-TOT-ŏ-mē):

Creation of an artificial opening into the bladder.

cystotomy (sis-TOT-ŏ-mē):

Incision into the bladder.

cytokine (SĪT-ŏ-kin):

Soluble, short-range, cell-to-cell communication molecule.

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D

dacrocystitis (dak-rē-ō-sis-TĪT-īs):

Inflammation of the tear (lacrimal) sac.

dacryocystorhinostomy (dak-rē-ō-sis-tō-rī-NOS-tō-mē):

creation of an artificial opening between the lacrimal sac and the nose (to restore drainage)

deamination (dē-am-ī-NĀ-shōn):

The removal of an amino group from a molecule.

debride, debridement (di-BRĒD, di-BRĒD-mēnt):

Remove damaged tissues and cell debris from a wound or burn to prevent infection and promote healing.

deep (DĒP):

Describes a position farther from the surface of the body.

deep lymphatic vessels (dēp lim-FAT-ik VES-ěls):

Lymphatic vessels of the organs.

defensins (dē-FĔN-sĭns):

The lysozyme enzyme and proteins which have antibacterial properties.

dehydration (dē-hī-DRĀ-shōn):

Loss of fluids/water is greater than what is taken in.

dendrite (DEN-drĭt):

One of many branchlike processes that extends from the neuron cell body and functions as a contact for incoming signals (synapses) from other neurons or sensory cells.

dendritic cells (den-DRIT-ik):

Pertaining to dendrites.

dermabrasion (DĔRM-ă-brā-zhōn):

Procedure to remove superficial scars using sandpaper or revolving wire brushes.

dermatitis (dĕr-mă-TĪT-īs):

Inflammation of the skin.

dermatoautoplasty (dĕr-mă-tō-AW-tō-plās-tē):

Surgical repair using one's own skin.

dermatocoinosis (dĕr-mă-tō-kō-nē-Ō-sĭs):

Abnormal condition of the skin caused by dust.

dermatofibroma (dĕr-mă-tō-fi-BRŌ-mă):

Fibrous tumor of the skin.

dermatoheteroplasty (dĕr-mă-tō-HĔT-ĕr-ō-plās-tē):

Surgical repair using skin from others.

dermatologic (dĕr-mă-TŌL-ō-jĭk):

Pertaining to dermatology.

dermatologist (dĕr-mă-TŌL-ō-jĭst):

Physician who specializes in treating diseases and disorders of the skin.

dermatology (dĕr-mă-TŌL-ō-jĕ):

Study of the skin.

dermatome (DĔR-mă-tŏm):

Instrument used to cut skin.

dermatopathology (dĕr-măt-ō-pă-THOL-ō-jĕ):

Study of diseases of the skin.

dermatoplasty (DĔR-măt-ō-plas-tĕ):

Plastic surgery of the skin.

dermis (DĔR-mĭs):

The layer of skin that is made of dense, irregular connective tissue that houses blood vessels, hair follicles, sweat glands, and other structures.

descending tract (dĕ-SEN-dĭng trakt):

Central nervous system fibers carrying motor commands from the brain to the spinal cord or periphery.

detrusor (dĕ-TRŪ-zŏr):

A muscle which forms a layer of the wall of the bladder.

diabetes mellitus (DM) (dĭ-ă-BĔT-ĕz):

An endocrine system disorder in which the pancreas does not produce insulin or the cells of the body do not respond to insulin. This results in high levels of glucose in the blood.

diapedesis (dĭ-ă-pĕ-DĔ-sĭs):

The passage of blood cells through the intact walls of the capillaries, typically accompanying inflammation.

diaphoresis (dĭ-ă-fŏ-RĔ-sĭs):

Profuse, excessive sweating.

diaphragm (dĭ-ă-FRAM):

A flat, dome shaped muscle located at the base of the lungs and thoracic cavity.

diaphragmatic (dĭ-ă-frăg-MAT-ĭk):

Pertaining to the diaphragm.

diaphragmatocele (dĭ-ă-frăg-MAT-ŏ-sĕl):

Hernia of the diaphragm.

diarthrosis (dĭ-ar-THRŌ-sĭs):

Freely moveable joints.

diastole (dĭ-AS-tŏ-lĕ):

Phase in the cardiac cycle where heart muscles relax allowing the chambers to fill with blood.

diastolic pressure (dī-AS-tō-lic):

The diastolic pressure is the lower value (usually about 80 mm Hg) and represents the arterial pressure of blood during ventricular relaxation, or diastole.

diencephalon (dī-ĕn-SEF-ă-lōn):

Region of the adult brain that retains its name from embryonic development and includes the thalamus and hypothalamus.

dilation and curettage (D&C) (dī-LĀ-shōn and kū-rĕ-TĀZH):

A procedure where the cervix is dilated (widened) and a curette (a sharp instrument) is used to remove the lining of the uterus. This procedure is conducted when there is abnormal bleeding from the uterus and also to remove any products of conception, for example following an incomplete miscarriage or abortion.

diplopia (dip-LŌ-pĕ-ă):

Double vision.

direct pathway:

Connections within the basal nuclei from the striatum to the globus pallidus internal segment and substantia nigra pars reticulata that disinhibit the thalamus to increase cortical control of movement.

discectomy (dis-KEK-tō-mĕ):

Excision of the intervertebral disk.

diskitis (dis(k)-ĪT-ĭs):

Inflammation of the intervertebral disk.

distal (DIS-tāl):

Describes a position in a limb that is farther from the point of attachment or the trunk of the body.

distended (dis-TEN-ded):

Stretch out.

diuresis (dī-yŭ-RE-sĭs):

Condition of urine passing through.

diverticulectomy (dī-vĕr-tĭk-ŭ-LĔK-tō-mĕ):

Excision of the diverticula.

diverticulitis (dī-vĕr-tĭk-yŭ-LĪT-ĭs):

Inflammation of the diverticulum.

diverticulosis (dī-vĕr-tĭk-yŭ-LŌ-sĭs):

Abnormal condition of having diverticula.

dorsal (posterior) nerve root (DOR-sāl (pōs-TĔ-rĕ-or) nĕrv root):

Axons entering the posterior horn of the spinal cord.

douching (doosh-ing):

Washing the vagina with fluid.

ductus arteriosus (DŪK-tŭs ār-tĕ-rĕ-Ō-sŭs):

Connection between pulmonary trunk and aorta in the fetal heart.

ductus deferens (DŪK-tūs DEF-ĕ-rĕnz):

Duct that transports sperm from the epididymis through the spermatic cord and into the ejaculatory duct.

duodenal (doo-ō-DĒN-āl):

Pertaining to the duodenum.

dura mater (DOOR-ă MĀT-ĕr):

Tough, fibrous, outer layer of the meninges that is attached to the inner surface of the cranium and vertebral column and surrounds the entire CNS.

duritis (dū-RĪ-tīs):

Inflammation of the dura mater.

dysentery (DIS-ĕn-ter-ĕ):

Inflammation of the intestine presenting with abdominal pain and bloody diarrhea.

dyskinesia (dis-kĭ-NĒ-zh(ĕ-)ă):

Condition of difficult movement.

dysmenorrhea (dis-men-ō-RĒ-ă):

Painful periods.

dyspareunia (dis-pă-ROO-nĕ-ă):

Painful intercourse.

dyspepsia (dis-PEP-shă, sĕ-ă):

Difficult digestion.

dysphagia (dis-FĀ-j(ĕ-)ă):

Difficulty swallowing.

dysphasia (dis-FĀ-zh(ĕ-)ă):

Condition of difficulty speaking.

dysphonia (dis-FŌ-nĕ-ă):

Condition of difficult speaking (voice).

dyspnea (dis(p)-NĒ-ă):

Difficulty breathing.

dystocia (dis-TŌ-sh(ĕ-)ă):

Labor that is difficult.

dystrophy (DIS-trŏ-fĕ):

Abnormal development.

dysuria (dis-ŪR-ĕ-ă):

Difficult or painful urine.

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E

eccrine sweat gland (ĚK-rĭn swet gland):

Type of gland that produces a hypotonic sweat for thermoregulation.

echocardiogram (ěk-ō-KĀR-dē-ō-grām):

A record (using) sound of the heart.

echocardiography (ek-ō-kard-ē-OG-ră-fē):

Process of using sound to record the heart.

eclampsia (e-KLAMP-sē-ă):

A very serious condition in pregnancy with hypertension; patients are at high risk of coma, convulsions, and even death.

ectopic pregnancy (ek-TOP-ik PREG-năn-sē):

The embryo implants any other place but the inner endo-uterine lining.

eczema (eg-ZĚ-mă):

Noninfectious, inflammatory disease presents as redness, blisters, scabs, and itching.

edema (ě-DE-mă):

Puffy swollen tissue due to accumulation of fluid.

efferent lymphatic vessels (EF-ě-rĕnt lim-FAT-ik VES-ĕls):

Lead out of a lymph node.

efferent nerves (EF-ě-rĕnt nĕrvs):

Nerve tissue that carries impulses away from the CNS towards the peripheral that result in motor response (movement).

ejaculation (i-jak-yŭ-LĀ-shŏn):

The action of ejecting semen from the body.

ejaculatory duct (ĕ-JĀK-ŭ-lă-tŏr-ĕ dŭkt):

Duct that connects the ampulla of the ductus deferens with the duct of the seminal vesicle at the prostatic urethra.

electrocardiogram (ECG, EKG) (ĕ-lĕk-trŏ-KĀR-dē-ō-grām):

A recording of the electrical impulses in the heart.

electrocardiograph (ĕ-lĕk-trŏ-KĀR-dē-ō-grăf):

Instrument used to record electrical activity within the heart.

electrocardiography (ĕ-lĕk-trŏ-KĀR-dē-ŎG-ră-fē):

Process of recording the electrical (activity) of the heart.

electrocochleography (ĕ-lek-trŏ-kok-lĕ-OG-ră-fē):

Process of recording the electrical activity in the cochlea.

electroencephalogram (ĕ-lek-trŏ-ĕn-SEF-ă-lŏ-gram):

The record of electrical activity of the brain.

electroencephalograph (ē-lĕk-trō-ĕn-SĔF-ă-lō-grăf):

Instrument used to record electrical activity of the brain.

electroencephalography (ĕ-lek-trō-ĕn-sef-ă-LOG-ră-fĕ):

Process of recording the electrical activity of the brain.

electromyography (ē-lĕk-trō-mī-ŌG-ră-fĕ):

Measures muscle response or electrical activity in response to a nerve's stimulation of the muscle.

elements (EL-ĕ-mĕnts):

Unique pure substances.

embolus (EM-bŏ-lŭs):

Obstruction in a blood vessel such as a blood clot, fatty mass, air bubble, or other foreign matter that interrupts the flow of blood to an organ or some part of the body.

embryogenic (ĕm-brĕ-ŏ-JĔN-ĭk):

Producing an embryo.

embryoid (EM-brĕ-ŏyd):

Resembling an embryo.

emesis (ĔM-ĕ-sĭs):

Vomiting.

emulsification (ĕ-mŭl-sĭ-fĭ-KĀ-shŭn):

The process of breaking down the fat into smaller blood cells which makes it easy for enzymes to function and digest food.

encephalitis (en-sef-ă-LĪT-ĭs):

Inflammation of the brain.

encephalomalacia (en-sef-ă-lō-mă-LĀ-sh(ĕ-)ă):

Softening of the brain.

encephalomyeloradiculitis (ĕn-sĕf-ă-lō-mĭ-ĕ-lō-ră-dĭk-ŭ-LĪ-tĭs):

Inflammation of brain, spinal cord and nerve roots.

encephalosclerosis (ĕn-SĔF-ă-lō-sklă-RŌ-sĭs):

Hardening of the brain.

endarterectomy (ĕnd-ăr-tĕr-ĔK-tŏ-mĕ):

Excision within the artery.

endocarditis (en-dŏ-kar-DĪT-ĭs):

Inflammation of the inner (lining) of the heart.

endocervical (en-dŏ-SĔR-vĭ-kăl):

Pertaining to within the cervix.

endocrine gland (En-dŏ-krĭn gland):

Tissue or organ that secretes hormones into the blood and lymph without ducts such that they may be transported to organs distant from the site of secretion.

endocrine system (En-dō-krīn SIS-tēm):

Cells, tissues, and organs that secrete hormones as a primary or secondary function and play an integral role in normal bodily processes.

endocrinologist (ĕn-dō-krī-NŌL-ŏ-jīst):

Specialist who studies and treats diseases of the endocrine system.

endocrinology (ĕn-dō-krīn-ŌL-ŏ-jē):

The study of the endocrine glands and hormones.

endocrinopathy (ĕn-dō-krīn-ŌP-ă-thē):

Disease of the endocrine system.

endometrial cancer (en-dō-MĒ-trē-ăl KAN-sēr):

Malignant tumor of the endometrium (also called uterine cancer).

endometriosis (en-dō-mē-trē-Ō-sīs):

Abnormal condition of the endometrium.

endometritis (e-dō-mē-TRĪT-is):

Inflammation of the endometrium.

endometrium (en-dō-MĒ-trē-ŭm):

The innermost layer containing a connective tissue lining covered by epithelial tissue that lines the lumen. Provides the site of implantation for a fertilized egg. Sheds during menstruation if no egg is fertilized.

endophthalmitis (ĕn-dŏf-thāl-MĪ-tīs):

Inflammation within the eye.

endoscope (EN-dŏ-skŏp):

Instrument used to view within (hollow organs).

endoscopic (en-dŏ-SKŌPik):

Pertaining to view within.

endoscopy (en-DOS-kŏ-pē):

Visual examination within.

endothelium (en-dŏ-THĒ-lē-ŭm):

The lining of the lumen of a blood vessel.

endotracheal (ĕn-dŏ-TRĀ-kē-ăl):

Pertaining to within the trachea.

enteric nervous system (ENS) (en-TER-ik NĒR-vŭs SIS-tēm):

Neural tissue associated with the digestive system that is responsible for nervous control through autonomic connections.

enteropathy (ent-ĕ-ROP-ă-thē):

Disease of the intestines.

enterorrhaphy (ĕn-tēr-OR-ă-fē):

Suturing of the intestine.

enucleation (ē-nū-klē-Ā-shūn):

Excision of a whole organ or mass without cutting into it.

enuresis (en-ū-RĒ-sīs):

Involuntary urination.

ependymal cell (ep-EN-dī-māl sel):

Glial cell type in the CNS responsible for producing cerebrospinal fluid.

epidermal (ĕp-ī-DĒR-mal):

Pertaining to upon/on the skin.

epidermis (ep-i-DĒR-mīs):

Outer layer of skin, made of closely packed epithelial cells.

epididymectomy (ĕp-ī-did-ī-MĚK-tō-mē):

Excision of the epididymis.

epididymis (ep-i-DID-ī-mīs):

(plural = epididymides) Coiled tubular structure in which sperm start to mature and are stored until ejaculation.

epididymitis (ep-ī-did-ī-MĪT-īs):

Inflammation/swelling of the epididymis.

epiglottis (EP-i-GLOT-īs):

The epiglottis, attached to the thyroid cartilage, is a very flexible piece of elastic cartilage that covers the opening of the trachea.

epinephrine (ep-ī-NEF-rin):

Also known as adrenaline, is a hormone and neurotransmitter and produced by the adrenal glands.

epiphyses (ĕ-PĪF-ī-sīs):

The ends of long bones, singular is epiphysis.

episioperineoplasty (ī-piz-ē-ō-per-ī-NĒ-ō-plas-tē):

Surgical repair of the vulva and the perineum.

episiorrhaphy (epē-sē-OR-ā-fē):

Suturing of the vulva.

episiotomy (ī-piz-ē-OT-ō-mē):

A procedure where an incision is made to widen the vaginal opening to prevent ripping or tearing of the perineum during delivery.

epistaxis (ĕp-ī-STĀK-sīs):

Nose bleed (rhinorrhagia).

epithalamus (ep-i-THAL-ā-mūs):

Region of the diencephalon containing the pineal gland.

epithelial membrane (ep-i-THĒ-lē-āl MEM-brān):

Membrane composed of epithelium attached to a layer of connective tissue.

eponym (ĚP-ō-nīm):

Terms that are named after a place or person.

erectile dysfunction (ě-RĚK-tīl dis-FŪNGK-shōn):

The inability of a male to attain or maintain an erection sufficient to perform sexual intercourse.

erythroblastosis fetalis (ě-rīth-rō-blās-TŌ-sīs fě-TAL-īs):

Disease of rh factor-positive newborns in rh-negative mothers with multiple rh-positive children; resulting from the action of maternal antibodies against fetal blood.

erythrocytes (ě-RITH-rō-sīts):

Red blood cells.

erythrocytopenia (ě-rīth-rō-sī-tō-PĚ-nē-ā):

Abnormal reduction of red (blood) cells.

erythroderma (ě-rith-rō-DĚR-mā):

Red skin.

erythropoietin (ě-rīth-rō-POY-ě-tīn):

Hormone produced by the kidneys that plays an important role in the homeostasis of red blood cells levels in the body.

esophageal (ě-sof-ā-JĚ-āl):

Pertaining to the esophagus.

esophagitis (ě-sof-ā-JĪT-īs):

Inflammation of the esophagus.

esophagogastroduodenoscopy (EGD) (ě-sof-ā-gō-gas-trō-doo-ō-dē-NOS-kō-pē):

Process of viewing the esophagus, stomach and duodenum.

esophagogastroplasty (ě-SŎF-ā-gō-GĀS-trō-plās-tē):

Surgical repair of the esophagus and stomach.

esophagogram (ě-SOF-ā-gō-gram):

Radiographic image of the esophagus.

esophagoscopy (ě-sof-ā-GOS-kō-pē):

Process of viewing the esophagus.

euglycemia (ū-glī-SĚ-mē-ā):

Normal (level) of blood sugar in the blood.

eupnea (ūp-NĚ-ā):

Normal breathing.

euthyroid (ū-THĪ-royd):

Resembling a normal thyroid gland.

excise, excision (ěk-SĪZ, ek-SIZH-ōn):

Remove by cutting out.

excretion (ĕks-KRĒ-shŭn):

Waste is eliminated from an organism. In vertebrates this is primarily carried out by the lungs, kidneys and skin.

exocrine (ĔKS-ō-krĭn):

To secrete externally, directly or through a duct.

exocrine system (ĔKS-ō-krĭn SIS-tĕm):

Cells, tissues, and organs that secrete substances directly to target tissues via glandular ducts.

exocytosis (ĕks-ō-sĭ-TŌ-sĭs):

Active transport of molecules out of the cell.

expiration (ĕks-pĭ-RĀ-shŭn):

Exhalation or the process of causing air to leave the lungs.

external nose (IK-stĕrnl nŏz):

The external nose consists of the surface and skeletal structures that result in the outward appearance of the nose and contribute to its numerous functions.

extramedullary hemopoiesis (eks-tră-MED-ŭl-er-rĕ hĕ-mŏ-poy-Ĕ-sĭs):

Hemopoiesis outside the medullary cavity of adult bones.

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F

fallopian tubes (uterine tubes) (fă-lō'pē-ăn toobs (ŪT-ĕ-rīn toobs):

Pair of tubes attached to the uterus providing a passageway for the ovum to move from the ovary to the uterus.

fascia (FASH-ĕ-ă):

Fibrous tissue.

fauces (FO-sēz):

The fauces is the opening at the connection between the oral cavity and the oropharynx.

feces (FĒ-sēz):

Stool, fecal matter.

femoral (FEM-ō-rāl):

Pertaining to the femur.

fetal (FĒT-ăl):

Pertaining to the fetus.

fibrocystic breast changes (FCC) (fī-brō-SĪS-tĭk):

Fibrosis, benign cysts, and pain or tenderness in one or both breasts (also called fibrocystic breasts).

fibroelastic membrane (fī-brō-ĕ-LĀS-tĭk MEM-brān):

A fibroelastic membrane is a flexible membrane that closes the posterior surface of the trachea, connecting the C-shaped cartilages.

fibromyalgia (fī-brō-mī-AL-j(ĕ-)ă):

Pain in the fibrous tissues of muscles.

fissures (FISH-ŭ-res):

A groove, natural division or elongated cleft, furrow or tear; naturally occurring in the brain, they are also known as sulcus/sulci.

fistula (FIS-chŭ-lă):

Abnormal passageway between two organs or an internal organ and the body surface.

flatus (FLĀ-tŭs):

Gas in the GI tract.

foramen magnum (fō-RĀ-mĕn MAG-nŭm):

Large opening in the occipital bone of the skull through which the spinal cord emerges and the vertebral arteries enter the cranium.

foramen ovale (fō-RĀ-mĕn Ō-văl):

Opening between right and left atria, which is normal in the fetal heart.

fornix (FOR-niks):

Superior portion of the vagina.

frontal lobe (FRŌN-tal lōb):

Region of the cerebral cortex directly beneath the frontal bone of the cranium.

frontal plane:

Plane that divides the body or an organ into an anterior (front) portion and a posterior (rear) portion.

frostbite (FROST-bit):

Conservation of core body heat results in the skin actually freezing.

fundus (FŪN-dūs):

A part of a hollow organ.

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G

gamete (GAM-ēt):

Haploid reproductive cell that contributes genetic material to form an offspring.

gangliitis (gang-glē-Ī-tīs):

Inflammation of the ganglion.

ganglion (GANG-glē-ōn):

Localized collection of neuron cell bodies in the peripheral nervous system.

ganglionectomy (gang-lē-ō-NĒK-tō-mē):

Excision of a ganglion.

gangrene (GANG-grēn):

Death of tissue due to blood supply loss.

gastrectomy (ga-STREK-tō-mē):

Excision of the stomach.

gastric (GAS-trik):

Pertaining to the stomach.

gastritis (gas-TRĪT-īs):

Inflammation of the stomach.

gastroenteritis (gas-trō-ent-ē-RĪT-īs):

Inflammation of the stomach and intestines.

gastroenterocolitis (gās-trō-ēn-tēr-ō-kōl-Ī-tīs):

Inflammation of the stomach, intestines, and colon.

gastroenterology (gās-trō-ēn-tēr-ŌL-ā-jē):

Study of the stomach and intestines.

gastrojejunostomy (gās-trō-jē-jū-NŌS-tō-mē):

Creation of an artificial opening between the stomach and the jejunum.

gastroplasty (GĀS-trō-plās-tē):

Surgical repair of the stomach.

gastroscope (GAS-trō-skōp):

Instrument used to view the stomach.

gastroscopy (gas-TROS-kō-pē):

Process of viewing the stomach.

gastrostomy (gās-TRŌS-tō-mē):

Creation of an artificial opening in the stomach.

genetic recombination (jĕn-ĒT-ĭk rē-kom-bĭ-NĀ-shōn):

The combining of gene segments from two different pathogens.

genital herpes (EN-ĭt-āl HĔRP-ēz):

A sexually transmitted disease characterized by blisters in the genital area, caused by the herpes simplex virus type 2.

gestation (jes-TĀ-shŏn):

The process of being pregnant.

gestational diabetes (jes-TĀ-shŏn-al dī-ă-BĔT-ēz):

The condition of developing diabetes during pregnancy. The newborn tend to be large at delivery and the mother is monitored closely for weight gain and glucose testing. The goal is to balance the sugars so the fetus is not too large for a vaginal delivery.

gestational hypertension (jes-TĀ-shŏn hī-pĕr-TEN-shŏn):

A condition where there is an increase in blood pressure during pregnancy. Blood pressure is monitoring closely during pregnancy for the safety of the mother and infant.

gingivectomy (jĭn-jĭ-VĔK-tŏ-mĕ):

Excision of the gums.

gingivitis (jin-jĭ-VĪT-is):

Inflammation of the gums.

glans penis (glanz PĔ-nĕz):

Bulbous end of the penis that contains a large number of nerve endings.

glial cell (GLĪ-ăl sel):

One of the various types of neural tissue cells responsible for maintenance of the tissue, and largely responsible for supporting neurons.

glioblastoma (glī-ŏ-blās-TŌ-mă):

Tumor composed of developing glial tissue.

gliocyte (GLĪ-ŏ-sĭt):

Glial cell.

glioma (glī-Ō-mă):

Tumor composed of the glial tissue.

glomerulonephritis (glŏ-mer-yŭ-lŏ-nĕ-FRĪT-is):

Inflammation of the gomeruli of the kidney.

glossitis (glo-SĪT-is):

Inflammation of the tongue.

glossopharyngeal (glos-ŏ-fă-RIN-j(ĕ-)ăl):

Pertaining to tongue and throat.

glossorrhaphy (glŏ-SOR-ă-fĕ):

Suturing of the tongue.

glottis (GLOT-is):

The glottis is composed of the vestibular folds, the true vocal cords, and the space between these folds.

glycemia (glī-SĒ-mē-ă):

Sugar in the blood.

glycosuria (glī-kō-SHOOR-ē-ă):

Sugar (glucose) in the urine.

gonadotropin-releasing hormone (GnRH) (gō-nad-ō-TRŌ-pīn ri-LĒS-ing HOR-mōn):

Hormone released by the hypothalamus that regulates the production of follicle-stimulating hormone and luteinizing hormone from the pituitary gland.

gonads (GŌ-nads):

Reproductive organs (testes in men and ovaries in women) that produce gametes and reproductive hormones.

gonorrhoea (gon-ō-RĒ-ă):

A sexually transmitted disease involving inflammatory discharge from the urethra or vagina.

graft-versus-host disease:

In bone marrow transplants, occurs when the transplanted cells mount an immune response against the recipient.

gravidā (GRĀV-ī-dă):

Pregnant (woman) Note, that this is referring to a woman who is or has been pregnant regardless of outcome.

gray matter (gray MAT-ēr):

Regions of the nervous system containing cell bodies of neurons with few or no myelinated axons; actually may be more pink or tan in color, but called gray in contrast to white matter.

great vessels (grāt VES-ĕls):

The great vessels include the superior vena cava, inferior vena cava, aorta and pulmonary trunk.

gynecologist (gīn-ĕ-KOL-ō-jīst):

Specialist in the study and treatment of the female reproductive system.

gynecology (gī-nĕ-KOL-ō-jĕ):

The study of the female reproductive system.

gynopathic (gī-nō-PATH-ĭk):

Pertaining to the women.

gyrus/gyri (JĪ-rūs/JĪ-rī):

Ridge formed by convolutions on the surface of the cerebrum or cerebellum.

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H

hard palate (hard PAL-ăt):

The hard palate is located at the anterior region of the nasal cavity and is composed of bone.

heart murmur (hart MŪR-mŭr):

An abnormal heart sound.

heart rate (hart rāt):

The number of times the heart contracts in one minute.

hematocrit (hē-MAT-ō-krīt):

A lab test which measures the percentage red blood cells in a sample of whole blood. It represents how much of the person's blood is made up of red blood cells, by volume.

hematologist (hēm-ă-TŌL-ō-jīst):

Physician who specializes and treats blood disorders.

hematology (hēm-ă-TŌL-ō-jē):

Study of blood.

hematoma (hēm-ă-TŌ-mă):

Tumor composed of blood.

hematopoiesis (hē-mat-ō-poy-Ē-sīs):

The process in which the body produces blood.

hematosalpinx (hē-măt-ō-SAL-pingks):

Blood in the uterine/fallopian tube.

hematuria (hē-mă-TOOR-ē-ă):

Blood in the urine.

hemicolectomy (hēm-ē-kō-LĒK-tō-mē):

Excision of half of the colon.

hemiparesis (hēm-ē-PĀR-ē-sīs):

Slight paralysis of half (right or left) side of the body.

hemiplegia (hēm-ē-PLĒ-jē-ă):

Paralysis that effects one side of the body.

hemodialysis (HD) (hē-mō-dī-ĀL-ī-sīs):

Procedure for removing impurities from the blood due to an inability of the kidney to function.

hemolysis (hemolysis):

Breaking apart of the erythrocyte cell membrane, allowing its contents to leak out.

hemopoiesis (hē-mō-poy-Ē-sīs):

The production of blood cells and platelets, which occurs in the bone marrow.

hemopoietic growth factors:

Chemical messengers which promote the proliferation and differentiation of formed elements and include erythropoietin, thrombopoietin, colony-stimulating factors, and interleukins.

hemorrhage (HEM-(ō-)rāj):

Excessive or uncontrolled bleeding from the blood vessels.

hemorrhagic stroke (HEM-(ō-)rāj-ik strōk):

Disruption of blood flow to the brain caused by bleeding within the cranial vault.

hemorrhoids (HEM-ō-royds):

Distended and swollen veins in the rectum and anus.

hemostasis (hē-MŌ-STĀ-sīs):

The process by which the body seals a ruptured blood vessel to prevent further blood loss. Biological process that results in stable equilibrium.

hemothrax (hē-mō-THŌR-aks):

Blood in the chest cavity.

hepatitis (hep-ă-TĪT-īs):

Inflammation of the liver.

hepatoma (hēp-ă-TŌ-mă):

Tumor of the liver.

hepatomegaly (hep-ăt-ō-MEG-ă-lē):

Enlarged liver.

herniorrhaphy (hēr-nē-OR-ă-fē):

Suturing of a hernia.

hiatal:

Location where the diaphragm has a small opening (hiatus) through which the esophagus passes before connecting.

hidradenitis (hi-dra-ĕn-ĪT-īs):

Inflammation of a sweat gland.

high-density lipoprotein (HDL) (hi DEN-sit-ē lip-ō-PRŌ-tēn):

High-density lipoprotein, often referred to as 'good' cholesterol.

hilum (HĪ-lūm):

The hilum is a ridge of cartilage that separates the two main bronchi. A concave region where blood vessels, lymphatic vessels, and nerves also enter the lungs.

hirsutism (HŪR-sŭ-tī-zm):

Excess hair all over the body.

histamine (HIS-tă-mēn):

Vasoactive mediator in granules of mast cells and is the primary cause of allergies and anaphylactic shock. Involved in the inflammatory response and typically causes itching.

homeostasis (hō-mē-ō-STĀ-sīs):

Biological process that results in stable equilibrium.

hormonal replacement therapy (HRT):

Replacement of hormones, estrogen, and progesterone, typically to treat symptoms associated with menopause.

hormone (HOR-mōn):

Secretion of an endocrine organ that travels via the bloodstream or lymphatics to induce a response in target cells or tissues in another part of the body.

human immunodeficiency virus (HIV) (hu-man im-yŭ-nō-dĕ-FISH-ĕn-sĕ VĪ-rŭs):

A retrovirus that attacks the T-helper cells of the immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome).

human papillomavirus (HPV (PAP-ĭ-LŌ-mă-VĪ-rŭs)):

A sexually transmitted disease with over 40 subtypes that cause diseases in humans ranging from common warts to cervical cancer.

humeral (HŪ-mĕr-ăl):

Pertaining to the humerus.

hydrocele (HĪ-drō-sĕl):

fluid-filled sac around the testicle.

hydrocelectomy (hĭ-drō-sĕ-LĔK-tō-mĕ):

Surgical removal of a fluid-filled sac around the testicle causing scrotal swelling (hydrocele).

hydrocephalus (hĭ-drō-SEF-ă-lŭs):

An abnormal buildup of cerebrospinal fluid (CSF) in the ventricles of the brain.

hydronephrosis (hĭ-drō-nĕf-RŌ-sīs):

Abnormal condition of water in the kidney.

hydrosalpinx (hĭ-drō-SĀL-pĭnks):

Water in the uterin/fallopian tube.

hydrostatic (hĭ-drō-STAT-ik):

Relating to the equilibrium of liquids and the pressure exerted by liquid at rest.

hymen (HĪ-mĕn):

The fold of membrane found near the opening of the vagina.

hymenectomy (hĭ-mĕn-ĔK-tō-mĕ):

Excision of the hymen.

hymenotomy (hĭ-mĕ-NOT-ō-mĕ):

Incision into the hymen.

hypercalcemia (hĭ-pĕr-kal-SĔ-mĕ-ă):

Excessive calcium in the blood.

hypercapnia (hĭ-pĕr-KAP-nĕ-ă):

Condition of excessive (greater than normal levels) carbon dioxide (in the blood).

hypercholesterolemia (hī-pĕr-kō-lĕs-tĕr-ōl-Ē-mĕ-ă):

Higher than normal levels of cholesterol in the blood.

hyperemesis (hī-pĕr-EM-ĕ-sĭs):

Excessive vomiting during pregnancy.

hyperemesis gravida (hī-pĕr-EM-ĕ-sĭs GRĀV-ĭ-dă):

Excessive vomiting during pregnancy.

hyperemesis gravidarum (hī-pĕr-EM-ĕ-sĭs GRĀV-ĭ-dŭm):

Hyperemesis can occur with any pregnant women, even a woman who miscarries. Often these women may require hospitalization for fluid and electrolyte intake.

hyperesthesia (hī-pĕr-es-THĒ-zh(ĕ-)ă):

Excessive sensitivity to stimuli.

hyperglycemia (hī-pĕr-glĭ-SĒ-mĕ-ă):

Excessive sugar in the blood.

hyperkalemia (hī-pĕr-kā-LĒ-mĕ-ă):

Excessive potassium in the blood.

hyperkinesia (hī-pĕr-kĭ-NĒ-zh(ĕ-)ă):

Condition of excessive movement.

hyperlipidemia (hī-pĕr-lĭp-ĭ-DĒ-mĕ-ă):

Excessive fat in the blood.

hyperopia (hī-pĕr-Ō-pĕ-ă):

Farsightedness; near objects look blurred but distant objects are more clearly visible.

hyperpnea (hī-pĕr-p-NĒ-ă):

Forced breathing or breathing that is excessive.

hypersensitivities (hī-pĕr-sĕn-sĭ-TĪV-ĭ-tĕs):

Reacting to something that would not normally evoke a reaction.

hypertension (HTN) (hī-pĕr-TEN-shŏn):

High blood pressure.

hyperthyroidism (hī-pĕr-THĪ-royd-ĭzm):

State of excessive thyroid gland activity.

hypertrophy (hī-PĔR-trŏ-fĕ):

Excessive development.

hypocalcemia (hī-pŏ-kal-SĒ-mĕ-ă):

Deficient calcium in the blood.

hypocapnia (hī-pŏ-KAP-nĕ-ă):

Condition of deficient (low levels) of carbon dioxide (in the blood).

hypodermic (hī-pŏ-DĔR-mĭk):

Pertaining to below the skin.

hypodermis (hī-pō-DĚR-mīs):

Literally means below the dermis. The layer of skin below the dermis that is composed mainly of loose connective and fatty tissues.

hypoglycemia (hī-pō-gli-SĒ-mē-ă):

Deficient sugar in the blood.

hypokalemia (hī-pō-kā-LĒ-mē-ă):

Deficient potassium in the blood.

hyponatremia (hī-pō-nā-TRĒ-mē-ă):

Deficient sodium in the blood.

hypopituitarism (hī-pō-pī-TŪ-īt-ă-rizm):

State of deficient pituitary gland activity.

hypopnea (hī-pōp-NĒ-ă):

Deficient breathing.

hypothalamus (hī-pō-THAL-ă-mūs):

Major region of the diencephalon that is responsible for coordinating autonomic and endocrine control of homeostasis.

hypothalamic:

A region of the forebrain below the thalamus.

hypothermia (hī-pō-THĚR-mē-ă):

Condition of (body) temperature that is below (normal).

hypothyroidism (hī-pō-THĪ-royd-izm):

Underactive thyroid gland, insufficient production of thyroid hormones (T3 and T4).

hypovolemic (hī-pō-vō-LĒ-mĕk):

State of abnormally low extracellular fluid in the body.

hypoxemia (hip-ok-SĒ-mē-ă):

Condition of deficient oxygen.

hypoxia (hī-POKS-ĕ-ă):

Literally: 'lower than normal amount of oxygen to tissues'. Hypoxia means that a tissue is not getting enough oxygen to survive and cell death is likely.

hysterectomy (his-tĕ-REK-tō-mĕ):

Surgical removal of the uterus.

hysteropexy (his-tĕ-RŌ-pĕks-ĕ):

Surgical fixation of the uterus.

hysterorrhexis (his-tĕ-rō-REK-sīs):

Rupture of the uterus.

hysterosalpingo-oophorectomy (hist-ĕ-rō-sal-ping-gō-ō-ŏ-fŏ-REK-tŏ-mĕ):

Excision of the uterus, uterine tubes, and ovaries.

hysterosalpingogram (HSG) (his-tě-rō-sal-PING-ō-gram):

Radiographic image of the uterus and uterine tubes.

hysteroscope (HIS-tě-rō-skōp):

Instrument used for visual examination of the uterus.

hysteroscopy (his-tě-ROS-kō-pē):

Visual examination of the uterus.

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I

ileocecal (il-ē-ō-SĒ-kāl):

Pertaining to the ileum and cecum.

ileostomy (IL-ē-OS-tō-mē):

Creation of an artificial opening in the ileum.

iliofemoral (il-ē-ō-FEM-ō-rāl):

Pertaining to the ilium and femur.

immune (i-MŪN):

Resistant to specific pathogens.

immune system (i-MŪN SIS-tēm):

Series of barriers, cells, and soluble mediators that combine to respond to infections of the body with pathogenic organisms.

immunity (im-Ū-nīt-ē):

After an infection, memory cells remain in the body for a long time and can very quickly mount an immune response against the same pathogen if it tries to re-infect. This protects us from getting diseases from the same pathogen over again.

immunodeficiency (im-yŭ-nō-dě-FISH-ĕn-sē):

Deficient immune response caused by immune system dysfunction brought on by disease or immune suppressive drugs.

immunological memory (im-yŭ-NOL-ō-jē- kāl MEM-ō-rē):

Ability of the adaptive immune response to mount a stronger and faster immune response upon re-exposure to a pathogen.

Immunologist (im-ū-NŌL-ō-jĭst):

Specialist who studies and treats immune system disorders.

immunology (im-yŭ-NOL-ō-jē):

Study of disorders of the immune system.

implantable cardioverter defibrillator (im-plan" TĀ-shŏn KĀR-dē-ō-vĕr-tĕr dē-FIB-rĭ-lāt-ŏr):

An electronic implant that provides an automatic shock to convert a dangerous heart rhythm to a normal heart rhythm.

incise, incision (in-SĪZ, in-SIZH-ŏn):

Surgical cut into or wound produced by a sharp instrument.

incision and drainage (in-SIZH-ŏn & DRĀN-ĭj):

Surgical cut made to allow the free flow of fluids from a lesion, wound, or cavity.

incontinence (in-KONT-in-ĕns):

Inability to control the bladder and/or bowels.

induction (in-DŪK-shōn):

The process of bringing on or starting labour. This may be done with a membrane sweep or through the use of IV oxytocin.

induration (ĪN-dū-rā-shun):

A firm, raised reddened patch of skin.

infection (in-FEK-shōn):

Invasion by disease-causing organisms.

inferior (or caudal) (in-FĒR-ē-ōr):

Describes a position below or lower than another part of the body proper; near or toward the tail (in humans, the coccyx, or lowest part of the spinal column).

inferior vena cava (in-FĒR-ē-ōr VĒ-nā KĀ-vā):

One of the two largest veins in the body. It carries deoxygenated blood from the torso and legs back to the heart.

infertility (in-fĕr-TIL-ĭt-ē):

Inability to achieve pregnancy.

inflammation (in-flā-MĀ-shōn):

Basic innate immune response characterized by heat, redness, pain, and swelling.

influenza (flu) (in-floo-EN-zā):

Highly contagious viral infection effecting the respiratory tract.

inguinal canal (ING-gwī-nāl kā-NAL):

Opening in abdominal wall that connects the testes to the abdominal cavity.

initial segment (ĭn-ĪSH-āl SEG-mĕnt):

First part of the axon as it emerges from the axon hillock, where the electrical signals known as action potentials are generated.

innate immune response (ĭn-NĀT i-MŪN ri-SPONS):

Rapid but relatively nonspecific immune response.

inspiration (ĭn-spĭr-Ā-shŭn):

Inhalation or process of breathing air into the lungs.

integration (int-ĕ-GRĀ-shōn):

Nervous system function that combines sensory perceptions and higher cognitive functions (memories, learning, emotion, etc.) to produce a response.

interatrial septum (nt-ĕr-RĀ-trĕ-āl SEP-tŭm):

The wall separating the right and left atria.

intercellular (ĭn-tĕr-SĒL-ŭ-lār):

Between cells.

intercostal (int-ĕr-KOS-tāl):

Pertaining to between the ribs.

interferons (int-ĕr-FĒR-on):

Early induced proteins made in virally infected cells that cause nearby cells to make antiviral proteins.

interictal (in-tēr-ĪK-tāl):

Occurs between seizures or attacks.

interstitial (in-tēr-STISH-āl):

Between cells of the tissues, often used interchangeably with 'intercellular'.

interstitial fluid (in-tēr-STISH-āl FLOO-īd):

Fluid that has leaked out of blood capillaries into the tissue spaces.

interstitial space (in-tēr-STISH-āl spās):

Spaces between individual cells in the tissues.

interventricular septum (int-ēr-ven-TRIK-yŭ-lār SEP-tŭm):

The wall of myocardium that separates the right and left ventricles.

intervertebral (in-tēr-VĔRT-ĕ-brĕl):

Pertaining to between the vertebrae.

intracellular (in-trā-SĔL-ŭ-lār):

Inside the cell membrane or within the cell.

intracerebral (in-trā-SER-ĕ-brāl):

Pertaining to within the cerebrum.

intracranial (in-trā-KRĀ-nĕ-āl):

Pertaining to within the cranium.

intra dermal (in-trā-DĔR-māl):

Pertaining to within the skin.

intramuscular (in-trā-MŪS-kyŭ-lār):

Pertaining to within the muscle.

intraocular (in-trā-OK-yŭ-lār):

Pertaining to within the eye.

intrapartum (in-trā-PART-ŭm):

Within (during) labour and delivery.

intravenous (in-trā-VĔ-nŭs):

Pertaining to within the vein.

in vitro fertilization (IVF) (in VĔ-trō fĕrt-il-ĭ-ZĀ-shŏn):

A process where the ova is fertilized outside the body and then implanted into the uterus.

iridectomy (ir-ĭ-DEK-tŏ-mĕ):

Excision of (part of) the iris.

iridoplegia (ir-ĭ-dŏ-PLĔ-j(ĕ-)ă, ĭr):

Paralysis of the iris.

iridotomy (ir-ĭ-DŌT-ŏ-mĕ):

Incision into the iris.

iritis (ī-RĪT-īs):

Inflammation of the iris.

ischemia (is-KĒ-mē-ă):

Insufficient blood and oxygen to cells of an organ. These cells are starving for oxygen, but they are still alive.

ischemic (is-KĒ-mē-ă):

Ischemia is a condition in which cells receive insufficient amounts of blood and oxygen.

ischemic stroke (is-KĒ-mē-ă strōk):

Disruption of blood flow to the brain because blood cannot flow through blood vessels as a result of a blockage or narrowing of the vessel.

ischiofibular (is-kē-ō-FIB-yŭ-lār):

Pertaining to the ischium and fibula.

isocoria (ī-sō-KŌ-rē-ă):

Condition of equal pupils.

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J

jaundice (JON-dīs):

Yellow-coloring of the mucous membrane and sclera.

jaundiced (JON-dīsd):

Yellow-colored.

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K

keloid (KĒ-loyd):

Formation of a raised or hypertrophic scar.

keratin (KER-ăt-ĭn):

Intracellular fibrous protein that gives hair, nails, and skin their hardness and water-resistant properties.

keratinocyte (kĕ-RĀT-ĭ-nō-sĭt):

Cell that manufactures and stores the protein keratin.

keratitis (ker-ă-TĪT-ĭs):

Inflammation of the cornea.

keratogenic (kĕr-ă-TŌJ-ĕ-nŭk):

Agent that causes growth of horny tissue.

keratomalacia (kĕr-ă-tō-mă-LĀ-shĕ-ă):

Softening of the cornea.

keratometer (kĕr-ă-TŌM-ĕ-ter):

Instrument used to measure (the curvature) of the eye.

keratoplasty (KER-ăt-ō-plas-tĕ): Surgical repair of the cornea.**keratosis (ker-ă-TŌ-sĭs):**

Abnormal condition of growth of horny tissue.

kinesthesia (kin-ĕs-THĒ-zh(ĕ-)ă):

Body movement.

kyphosis (kĭ-FŌ-sĭs):

Abnormal condition of convexity of the spine.

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L

labia (LĀ-bē-ă):

Lips of the mouth.

labyrinthectomy (lab-ĭ-rin-THEK-tō-mē):

Excision of the inner ear (labyrinth).

labyrinthitis (lab-ĭ-rin-THĪT-ĭs):

Inflammation of the inner ear (labyrinth).

laceration (las-ĕ-RĀ-shōn):

Torn, ragged-edged wound.

lacrimal (LAK-rĭ-māl):

Pertaining to the tear duct.

lactation (lak-TĀ-shōn):

Secretion of milk.

lacteals (LAK-tē-āls):

The lymphatic vessels of the small intestine which absorb digested fats.

lactic (LAK-tik):

Pertaining to milk.

lactogenic (lak-tō-JĔN-ĭk):

Producing milk.

lactorrhea (lak-tō-RĔ-ă):

Discharge of milk.

lamina propria:

Connective tissue of the mucous membrane which helps support epithelial layer.

laminectomy (lām-ĭ-NĔK-tō-mē):

Excision of the lamina.

laparoscope (LAP-ă-rō-skōp):

Instrument used to view the abdominal cavity.

laparoscopy (lap-ă-ROS-kō-pē):

Process of viewing internal organs in the abdomen.

laparotomy (lap-ă-ROT-ō-mē):

Incision into the abdominal cavity.

laryngeal (lar-ĭn-JĔ-āl):

Pertaining to the larynx.

laryngitis (lar-ĭn-JĪT-ĭs):

Inflammation of the larynx.

laryngopharynx (lār-ĭn-gō-FĀR-ĭnks):

The laryngopharynx borders the oropharynx, trachea, and esophagus.

laryngoplasty (lār-ĭN-gō-plās-tē):

Surgical repair of the larynx.

laryngoscope (lā-RING-gō-skōp):

Instrument used for visual examination of the larynx.

laryngoscopy (lār-ĭn-GŌS-kō-pē):

Process of viewing the larynx.

laryngospasm (lār-ĭN-gō-spāzm):

Spasmodic contraction of the larynx.

laryngostomy (lār-ĭn-GŌS-tō-mē):

Creation of an artificial opening in to the larynx.

laryngotracheobronchitis (LTB) (lā-rĭng-gō-trā-kē-ō-brōng-KĪ-tĭs):

Inflammation of the larynx, trachea, and bronchi.

laryngotracheotomy (lār-ĭn-gō-trā-kē-ŌT-ō-mē):

Incision into the larynx and trachea.

larynx (LAR-ingks):

The larynx is a cartilaginous structure inferior to the laryngopharynx that connects the pharynx to the trachea and helps regulate the volume of air that enters and leaves the lungs.

laser surgery (LĀ-zēr SŪRJ-ĕ-rē):

A surgical procedure using a powerful beam of light to cut or burn tissue.

lateral (LĀT-ĕr- āl):

Describes the side or direction toward the side of the body.

leiodermia (lĭ-ō-DĒR-mē-ā):

Condition of smooth skin.

lesion (LĒ-zhōn):

Visible change in tissue resulting from injury or disease.

lethargy (LĒTH-ār-jē):

Periods of weakness.

leukemia (loo-KĒ-mē-ā):

A cancer involving an abundance of leukocytes. It may involve only one specific type of leukocyte from either the myeloid line (myelocytic leukemia) or the lymphoid line (lymphocytic leukemia). In chronic leukemia, mature leukocytes accumulate and fail to die. In acute leukemia, there is an overproduction of young, immature leukocytes. In both conditions the cells do not function properly.

leukocoria (loo-kō-KŌR-ē-ā):

Condition of white pupil.

leukocytes (loo-kō-SĪT-ĭs):

White blood cells.

leukocytopenia (loo-kō-sī-tō-PĒ-nē-ă):

Abnormal reduction of white (blood) cells.

leukoderma (loo-kō-PLĀ-kē-ă):

White patches caused by depigmentation.

leukoplakia (loo-kō-DĚR-mă):

White, thickened patches on mucus membrane tissue of the tongue or cheek.

leukorrhea (loo-kō-RĚ-ă):

White discharge.

Leydig cells (LĪ-dig sels):

Cells between the seminiferous tubules of the testes that produce testosterone; a type of interstitial cell.

lingual (LĪNG-gwăl):

Pertaining to the tongue.

lingual tonsils (LĪNG-gwăl TON-sĭls):

A collection of lymphatic tissue located in the lamina propria of the root of the tongue.

literally (LIT-ĕ-răl-li):

Follows the rules exactly.

lithotripsy (LITH-ŏ-trip-sĕ):

Surgical crushing of stone(s).

lobar pneumonia (LŌ-băr noo-MŌN-yă):

Disease state of the lung pertaining to the lobe(s).

lobectomy (lŏ-BĚK-tŏ-mĕ):

Excision of the lobe(s).

lochia (LŌ-kē-ă):

Vaginal discharge after birth.

lordosis (lor-DŌ-sĭs):

Abnormal condition of increased concavity of the spine (bent forward).

low-density lipoprotein (lŏ DEN-sit-ĕ lip-ŏ-PRŌ-tĕn):

Low-density lipoprotein, often referred to as 'bad' cholesterol (LDL).

lumbago (lŭm-BĀ-gŏ):

Lower back pain.

lumbar (LŬM-băr):

Pertaining to the lumbar region of the spine.

lumbar puncture (LŬM-băr PŬNGK-chŭr):

Procedure used to withdraw CSF from the lower lumbar region of the vertebral column that avoids the risk of damaging CNS tissue because the spinal cord ends at the upper lumbar vertebrae.

lumbocostal (lŭm-bŏ-KOS-tăl):

Pertaining to the lumbar region of the spine and ribs.

lumbosacral (lŭm-bō-SĀ-krāl):

Pertaining to the lumbar region of the spine and sacrum.

lupus (LOO-pūs):

An autoimmune disease in which the body mounts an immune response against its own tissues, causing chronic inflammation and tissue damage.

lymph (limf):

Fluid contained within the lymphatic system.

lymph node (limf nōd):

One of the bean-shaped organs found associated with the lymphatic vessels.

lymphadenitis (lim-fad-ĕn-ĪT-īs):

Inflammation of lymph nodes.

lymphadenopathy (lim-fad-ĕ-NOP-ă-thĕ):

Disease of lymph nodes.

lymphatic capillaries (lim-FAT-ik KAP-ĭ-ler-ĕ):

Smallest of the lymphatic vessels and the origin of lymph flow.

lymphatic system (lim-FAT-ik SIS-tĕm):

Network of lymphatic vessels, lymph nodes, and ducts that carries lymph from the tissues and back to the bloodstream.

lymphatic trunks (lim-FAT-ik trŭnk):

Large lymphatics that collect lymph from smaller lymphatic vessels and empties into the blood via lymphatic ducts.

lymphocytes (LIM-fō-sīt):

White blood cells characterized by a large nucleus and small rim of cytoplasm.

lymphoid (LIM-foyd):

Resembling lymph or lymphatic tissues.

lymphoid nodules (LIM-foyd NOJ-ool):

Unencapsulated patches of lymphoid tissue found throughout the body.

lymphoma (lim-FŌ-mă):

A form of cancer in which masses of malignant T and/or B lymphocytes collect in lymph nodes, the spleen, the liver, and other tissues. These leukocytes do not function properly, and the patient is vulnerable to infection.

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M

macrophages (MAK-rō-fāj):

A type of leukocyte (usually a monocyte) that has the ability to ingest and destroy other cells or pathogens.

macule (MAK-ūl):

Flat, colored spot on the skin.

magnetic resonance imaging (MRI) (MAG-ně-tik RĚZ-ō-nāns IM-ă-jing):

Radio frequency waves and a strong magnetic field provide clear and detailed pictures of internal organs and tissues.

mainstream smoke (MĀN-strēm smōk):

Smoke inhaled by the smoker.

Major Histocompatibility Complex (hīs-tō-kōm-păt-ī-BĪL-ī-tē KOM-pleks):

Major Histocompatibility Complex molecules, also called Human Leukocyte Antigen (HLA) are protein structures found on the outside of cells that help the immune system recognize non-self antigens.

malabsorption (mal-ăb-SORP-shōn):

A disorder that occurs when people are unable to absorb nutrients from their diets.

maldigestion (māl-dī-JĚS-chŭn):

Poor breakdown of food.

malignant (mă-LIG-nānt):

Cancerous.

mammogram (MĀM-ō-grām):

Radiographic image of the breast.

mammography (ma-MOG-ră-fē):

Radiographic imaging of the breast.

mammoplasty (MAM-ă-plas-tē):

Surgical repair of the breast particularly after a mastectomy.

mast cell:

Cell found in the skin and the lining of body cells that contains cytoplasmic granules with vasoactive mediators such as histamine.

mastalgia (mas-TAL-jă):

Pain in the breast.

mastectomy (mas-TEK-tō-mē):

Excision of breast(s) and or breast tissue.

mastitis (mas-TĪT-īs):

Inflammation of the breast.

mastoidectomy (mās-tōy-d-ĚK-tō-mē):

Excision of the mastoid bone.

mastoiditis (mas-toyd-ĪT-īs):

Inflammation of the mastoid bone.

mastoidotomy (mās-toyd-ŌT-ō-mē):

Incision into the mastoid bone.

mastopexy (MAS-tō-pek-sē):

Surgical fixation of the breast.

maxillectomy (māks-ĭl-EK-tō-mē):

Excision of the maxilla.

maxillitis (māks-ĭl-Ī-tīs):

Inflammation of the maxilla.

meatal (mē-ĀT-āl):

Pertaining to the meatus.

meatotomy (mē-ă-TOT-ō-mē):

Incision into the meatus.

mechanoreceptors (mek-ă-nō-rē-SEP-tōr):

A sensory neuron that responds to mechanical pressure.

meconium (mē-KŌ-nē-ŭm):

First stool of the newborn.

meconium staining (mē-KŌ-nē-ŭm STĀN-ĭng):

When the fetus defecates while in utero; the first defecation is called meconium, it is black and sticky. If the infant inhales the meconium upon delivery or through the birth canal, the meconium can be aspirated into the lungs and stick to the lung tissue. The newborn will have problems breathing and go into distress. The newborn's umbilical cord will be stained a brownish color.

medial (MĒD-ē-āl):

Describes the middle or direction toward the middle of the body.

medulla oblongata (mē-DŪL-ă ob-long-GOT-ă):

A part of the brain stem responsible for control of heart rate and breathing. The continuation of the spinal cord within the skull, forming the lowest part of the brainstem, contains the control centers for heart and lung nerve function.

Meissner corpuscle (MĪS-nēr KOR-pūs-ĕl):

Tactile corpuscle that responds to light and touch, touch receptor.

melanocyte (MĒL-ăn-ō-sīt):

Specialized cells that produce melanin which is a dark pigment responsible for colouration of skin and hair.

melanoma (mel-ă-NŌ-mă):

Cancer characterized by uncontrolled growth of melanocytes.

melena (mē-LĒ-nă):

Black tarry stool that contains blood from the GI tract.

memory t cells (MEM-ō-rē t sels):

Long-lived immune cell reserved for future exposure to an pathogen.

menarche (mĕn-ĀR-kĕ):

Beginning of menstruation.

meninges (mĕ-NIN-jĕz):

Protective outer coverings of the CNS composed of connective tissue.

meningioma (mĕn-ĭn-jĕ-Ō-mă):

Tumor of the meninges.

meningitis (men-ĕn-JĪT-ĭs):

Inflammation of the meninges.

meningocele (mĕn-ĪN-gō-sĕl):

Protrusion of the meninges.

meningomyelocele (mĕ-nĭng-gō-MĪ-ĕ-lō-sĕl):

Protrusion of the meninges and spinal cord.

meniscectomy (mĕn-ĭ-SĔK-tō-mĕ):

Excision of the meniscus.

meniscitis (men-ĭ-SĪT-ĭs):

Inflammation of the meniscus.

menometrorrhagia (mĕn-ō-mĕt-rō-RĀ-jĕ-ă):

Excessive bleeding from the uterus at menstruation.

menopause (MEN-ō-poz):

Cessation of menstruation.

menorrhagia (mĕn-ō-RĀ-jĕ-ă):

Excessive bleeding at menstruation.

mental (men-TAL):

Pertaining to the brain.

metastasize (mĕ-TĀS-tă-sĭz):

Production of cells that can mobilize and establish tumors in other organs of the body.

metrorrhagia (mĕ-trō-RĀ-jă):

Excessive bleeding from the uterus.

microcephalus (mĭ-krō-SĔF-ă-lŭs):

Small head.

microglia (mĭ-KROG-lĕ-ă):

Glial cell type in the CNS that serves as the resident component of the immune system.

micturate (MĪK-tŭ-răt):

To pass urine.

midbrain (MID-brān):

A portion of the brainstem, positioned above the pons, also called mesencephalon, assist in motor reflexes associated with visual and auditory stimuli.

midwife (MĪD-wīf):

Individual who practices midwifery.

midwifery (mĭd-WĪF-ēr-ē):

Practice of assisting in childbirth.

mitochondria (mīt-ō-KŌN-drē-ōn):

An organelle found in large numbers in most cells.

mitral valve (MĪ-trāl valv):

Also known as the bicuspid valve.

modern-day language term:

Terms from the English language.

molecule (MOL-ē-kūl):

Chemical building block of all body structures.

monocyte (MON-ō-sīt):

Precursor to macrophages and dendritic cells seen in the blood.

mononeuropathy (mon-ō-noo-ROP-ă-thē):

Disease affecting a single nerve.

monoparesis (mon-ō-pă-RĒ-sīs):

Slight paralysis of one (limb).

monoplegia (mōn-ō-PLĒ-jē-ă):

Paralysis of one (limb).

morcellation (mor-sē-LĀ-shōn):

Cutting or grinding solid tissue into smaller pieces for removal.

motor nerves:

Peripheral, efferent, myelinated nerve tissue that stimulates muscle contraction.

MRI ultrasound fusion biopsy (FŪ-zhōn BĪ-op-sē):

Combination of magnetic resonance imaging with transrectal ultrasound (TRUS) to obtain a tissue from a prostate lesion. The combined MRI-TRUS image is used to direct the biopsy needle into the area of the prostate that looked suspicious on MRI.

mucoïd (MŪ-koyd):

Resembling mucus.

mucosa-associated lymphoid tissue (malt) (mū-KŌ-să ă-sō-s(h)ē-ĀTE LIM-foyd TISH-oo):

Lymphoid nodule associated with the mucosa.

mucosal (mū-KŌ-sāl):

Mucous membranes line body cavities that open to the outside world, including the respiratory tract, gastrointestinal tract, urinary tract and reproductive tracts.

mucous (MŪ-kūs):

Pertaining to mucus.

mucous membrane (MŪ-kūs MEM-brān):

Composite of connective and epithelial tissues which lines the body cavities and hollow passageways that open to the external environment.

mucus (MŪ-kūs):

Slimy liquid secreted by mucous membranes.

multigravida (mŭl-tī-GRĀV-ī-dā):

Many pregnancies A woman who has been pregnant two or more times regardless of outcome.

multipara (mŭl-TĪP-ā-rā):

Many births.

multiple myeloma (MŪL-tī-pl mī-ĕ-LŌ-mā):

Tumors of the bone marrow.

multipolar (mŭl-tī-PŌL-ār):

Shape of a neuron that has multiple processes—the axon and two or more dendrites.

myalgia (mī-AL-j(ĕ-)ā):

Muscle pain.

myasthenia (mī-ās-THĒ-nē-ā):

Weakness of muscles, muscle weakness.

myasthenia gravis (mī-ās-THĒ-nē-ā grāv-īs):

Grave or serious muscle weakness.

myelin (MĪ-ĕ-līn):

Lipid-rich insulating substance surrounding the axons of many neurons, allowing for faster transmission of electrical signals.

myelin sheath (MĪ-ĕ-līn shēth):

Lipid-rich layer of insulation that surrounds an axon, formed by oligodendrocytes in the CNS and Schwann cells in the PNS; facilitates the transmission of electrical signals.

myeloma (mī-ĕ-LŌ-mā):

Tumor in the spinal cord.

myelomalacia (mī-ĕ-lō-mā-LĀ-shē-ā):

Softening of the spinal cord.

myelopoiesis (mī-ĕ-lō-poy-Ē-sīs):

Formation of bone marrow.

myocardial infarction (MI) (mī-ō-kar'dē-āl in-FARK-shŏn):

heart attack, caused by lack of blood flow and oxygen to the heart.

myocarditis (mī-ō-kar-DĪT-īs):

Inflammation of the muscle of the heart.

myometritis (mī-ō-mē-TRĪ-tīs):

Inflammation of the uterine muscle.

myopia (mī-Ō-pē-ă):

Nearsightedness; near objects are clear and seen but far objects are not.

myorrhaphy (mī-OR-ă-fē):

Suturing of a muscle.

myringitis (mĭr-ĭn-JĪ-tīs):

Inflammation of the tympanic membrane.

myringoplasty (mĭr-ĪN-gō-plăst-ē):

Surgical repair of the tympanic membrane.

myringotomy (mĭr-ĭn-GŎT-ō-mē):

Incision into the tympanic membrane.

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N

naïve lymphocyte (nī-ĒV LIM-fō-sīts):

Mature B or T cell that has not yet encountered antigen for the first time.

nasal cavity (NĀ-zāl KAV-īt-ē):

The inside of your nose.

nasogastric (nā-zō-GĀS-trīk):

Pertaining to the nose and stomach.

nasolacrimal (nā-zō-LAK-rī-māl):

Pertaining to the nose and the tear duct.

nasopharyngeal (nā-zō-FAR-in-JĒ-āl):

Pertaining to the nose and pharynx.

nasopharyngitis (nā-zō-fār-īn-JĪ-tīs):

Inflammation of the nose and pharynx.

nasopharynx (nā-zō-FAR-ingks):

The nasopharynx serves as an airway and is continuous with the nasal cavity.

natal (NĀT-āl):

Pertaining to born.

natural killer cell (nk):

Cytotoxic lymphocyte of innate immune response.

nausea (NAW-sē-ă, naw-zē-ă):

Urge to vomit.

nebulizer (NEB-yü-lī-zēr):

Device that creates a mist for giving respiratory treatment or medication.

necrosis (ně-KRŌ-sīs):

Condition of death.

neonatal (nē-ō-NĀT-āl):

Pertaining to the newborn. For example neonatal record, neonatal unit.

neonate (NĒ-ō-nāt):

New born (infant from birth to four weeks of age).

neonatologist (nē-ō-nā-TŌL-ō-jīst):

Physician who studies and treats disorders of the new born.

neonatology (nē-ō-nā-TŌL-ō-jē):

Study of the newborn.

nephrectomy (ně-FREK-tō-mē):

Excision of the kidney.

nephritis (ně-FRĪT-īs):

Inflammation of the kidney.

nephrography (ně-FRÖG-rā-fē):

Radiographic imaging of the kidney.

nephrolithiasis (nef-rō-li-THĪ-ā-sīs):

Condition of stone(s) in the kidney.

nephrolithotripsy (něf-rō-LITH-ō-trip-sē):

Surgical crushing of stone(s) in the kidney.

nephrolitotomy (něf-rō-lith-ŌT-ō-mē):

Incision into the kidney to remove stone(s).

nephrologist (ně-FRÖ-lō-jīst):

Specialist who studies and treats disease and disorders of the kidney.

nephrology (ně-FRÖL-ā-jē):

Study of the kidney.

nephrolysis (ně-fröl-ī-sīs):

Separating the kidney (from body structures).

nephroma (ně-FRŌ-mā):

Tumor of kidney.

nephromegaly (něf-rō-MĚG-ā-lē):

Enlarged kidney.

nephropexy (NĚF-rō-pěks-ē):

Surgical fixation of the kidney.

nephroscopy (NĚF-rā-skō-pē):

Process of viewing the kidney.

nephrosonography (ně-FRŌ-sō-NOG-rā-fē):

Process of recording the kidney using sound.

nephrostomy (ně-FRŌS-tō-mē):

Creation of an artificial opening into the kidney.

nerve (něrv):

Cord-like bundle of axons located in the peripheral nervous system that transmits sensory input and response output to and from the central nervous system.

neurectomy (nū-RĚK-tō-mē):

Excision of nerves.

neuritis (noo-RĪ-tīs):

Inflammation of the nerves.

neuroarthropathy (noo-rō-ar-THROP-ā-thē, nū):

Disease of the nerves and joints.

neuroglia (noo-ROG-lē-ă):

Supportive tissue of the nervous system, including the network of branched cells in the central nervous system (astrocytes, microglia, and oligodendrocytes) and the supporting cells of the peripheral nervous system (Schwann cells and satellite cells), also called glia.

neuroid (noo-rōyd):

Resembling a nerve.

neurologist (nū-RŌL-ō-jīst):

Specialist who studies and treats the nervous system.

neurology (noo-ROL-ō-jē):

Study of nerves.

neurolysis (noo-ro-LĪ-sīs):

Dissolution of nerve (for pain management).

neuroma (noor-Ō-mă):

Tumor made up of nerve (cells).

neuron (NOOR-on):

Neural tissue cell that is primarily responsible for generating and propagating electrical signals into, within, and out of the nervous system.

neuroplasty (NŪ-rō-plās-tē):

Surgical repair of a nerve.

neuropathy (noo-ROP-ă-thē):

Disease of (peripheral) nerves.

neurorrhaphy (nū-ROR-ă-fē):

Suturing of a nerve.

neurosensory (nū-rō-SĒN-sō-rē):

Relating to afferent nerves.

neurotomy (nū-RŌT-ō-mē):

Incision into a nerve.

neurotransmitter (noor-ō-trans-MIT-ēr):

Chemical that is released from a nerve cell, transmits an impulse from a nerve cell to another nerve, muscle, organ, or other tissue.

neutrophil (nū-trō-FĪL-īk):

Phagocytic white blood cell recruited from the bloodstream to the site of infection via the bloodstream.

nevus (NĒ-vūs):

A pigmented skin blemish.

nociceptors (nō-sē-SEP-tōrs):

Sensory neurons that respond to pain.

nocturia (nŏk-TŪ-rē-ă):

Night urination.

node of Ranvier (nōd of ron-vē-Ā):

Gap between two myelinated regions of an axon, allowing for strengthening of the electrical signal as it propagates down the axon.

nodule (NOJ-ool):

A small node-like structure.

non-stress test (nŭn stres test):

Test conducted on the pregnant woman to assess the fetal heart rate (FHR).

norepinephrine (nor-ep-ĭ-NEF-rĭn):

A natural chemical in the body that acts as both a stress hormone and neurotransmitter (a substance that sends signals between nerve cells). It's released into the blood as a stress hormone when the brain perceives stress.

nosocomial infection (nos-ŏ-KŌ-mē-āl in-FEK-shŏn):

Infection acquired in hospital.

nucleus (NOO-klē-ŭs):

In the nervous system, a localized collection of neuron cell bodies that are functionally related; a “center” of neural function.

nulligravida (nŭl-ĭ-GRĀV-ĭ-dā):

A woman who has never been pregnant.

nullipara (nŭl-ĪP-ā-rā):

No pregnancies a woman who has never been pregnant.

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O

obesity (ō-BĒ-sīt-ē):

Abnormal increase in the proportion of fat cells resulting in excess body weight for height.

obstetrician (ob-stĕ-TRISH-ăn):

The person who specializes in the study of obstetrics and gynecology and are referred to as OB/GYN Obstetrics and Gynecology.

Obstetrics (ōb-STE-triks):

Medical specialty dealing with pregnancy, childbirth, and puerperium.

occipital lobe (ok-SIP-īt-ăl lōb):

Region of the cerebral cortex directly beneath the occipital bone of the cranium.

occlude (ō-KLOOD):

Block or close tightly.

oculomycosis (ōk-ū-lō-mī-KŌ-sīs):

Abnormal condition of the eye caused by a fungus.

olfaction (ōl-FĀK-shŭn):

Special sense responsible for smell, which has a unique, direct connection to the cerebrum.

oligodendrocyte (ol-ī-gō-DEN-drō-sīt):

Glial cell type in the CNS that provides the myelin insulation for axons in tracts.

oligohydramnios (ōl-īg-ō-hī-DRĀM-nē-ōs):

A condition where there is minimal amniotic fluid within the placental sac. Too little fluid can restrict the fetus from movement and growth.

oligomenorrhea (ōl-ī-gō-mĕn-ō-RĒ-ă):

Infrequent or irregular periods.

oligoovulation (ol-i-gō-ov-yŭ-LĀ-shŏn):

Infrequent ovulation.

oligospermia (ōl-ī-gō-SPĒR-mĕ-ă):

Condition of scanty sperm.

oliguria (ōl-īg-Ū-rĕ-ă):

Scanty urine (output).

omentum (ō-MENT-ŭm):

Fatty tissue that stretches over the abdomen, plays a role in immune response and the growth of certain cancers.

omphalitis (ōm-fāl-Ī-tīs):

Inflammation of the umbilicus.

omphalocele (ōm-FĀL-ō-sĕl):

Herniation of the umbilicus.

onychocryptosis (ŏn-ĭ-kŏ-krip-TŌ-sis):

Abnormal condition of a hidden nail.

onychomalacia (ŏn-ĭ-kŏ-mă-LĀ-shă):

Softening of the nails.

onychomycosis (on-i-kŏ-mĭ-KŌ-sĭs):

Abnormal condition of a fungus in the nails.

onychophagia (ŏn-ĭ-KŎF-ă-jĕ):

Eating the nails (nail biting).

oocyte (Ō-ŏ-sĭt):

Female gamete.

oophorectomy (ŏ-ŏ-fŏ-REK-tŏ-mĕ):

Surgical removal of the fallopian/uterine tubes.

oophoritis (ŏ-ŏf-ŏ-RĪ-tĭs):

Inflammation of the ovary.

ophthalmalgia (ŏf-thăl-MĀL-jĕ-ă):

Pain in the eye.

ophthalmia neonatorum (of-THAL-mĕ-ă nĕ-ŏ-NĀ-tŏr-ăm):

Conjunctivitis in newborns (severe).

ophthalmic (of-THAL-mik):

Pertaining to the eye.

ophthalmologist (ŏf-thăl-MŎL-ŏ-jĭst):

Specialist of the eye.

ophthalmology (Ophth) (ŏf-thăl-MŎL-ŏ-jĕ):

Study of the eye.

ophthalmopathy (ŏf-thăl-MŎP-ă-thĕ):

Disease of the eye.

ophthalmoplegia (of-thal-mŏ-PLĒ-j(ĕ)-ă):

Paralysis of the eye.

ophthalmoscope (of-THAL-mŏ-skŏp):

Instrument used to view the eye.

ophthalmoscopy (of-thal-MOS-kŏ-pĕ):

Process of viewing the eye.

opsonization (ŏp-să-nĭ-ZĀ-shŭn):

An antibody or an antimicrobial protein binds to a pathogen, thereby marking it as a target for phagocytes.

optic (OP-tik):

Pertaining to vision.

Optician (ōp-TĪSH-ăn):

Specialist who fills prescriptions for lenses but cannot prescribe.

Optometrist (ōp-TŌM-ĕ-trĭst):

Specialist who diagnoses, treats and manages diseases and disorders of the eye (Doctor of Optometry).

optometry (op-TOM-ĕ-trĕ):

Measuring vision.

oral (ŌR-ăl):

Pertaining to the mouth.

orchialgia (or-kĕ-ĀL-jĕ-ă):

Pain in the testis.

orchiditis (or-kĭ-DĪ-tĭs):

Inflammation of the testis.

orchiectomy (or-kĕ-EK-tŏ-mĕ):

Excision of the testis.

orchiepididymitis (or-kĕ-ĕp-ĭ-dĭd-ĭ-MĪ-tĭs):

Inflammation of the testis and epididymis.

orchiopexy (or-kĕ-ŏ-PĔK-sĕ):

Surgical fixation of the testicle.

orchioplasty (OR-kĕ-ŏ-plās-tĕ):

Surgical repair of the testis.

orchiotomy (or-kĕ-ŌT-ŏ-mĕ):

Incision into the testis.

orchitis (or-KĪ-tĭs):

Inflammation of the testis.

organ (OR-găn):

Anatomically distinct structure of the body composed of two or more tissue types.

organ system (OR-găn SIS-tĕm):

Group of organs that work together to perform major functions or meet the physiological needs of the body.

organelle (OR-gă-nel):

Tiny functioning units inside of a cell.

organism (OR-găn-ĭzm):

Living being that has a cellular structure and can independently perform all physiological functions necessary for life.

orgasm (OR-gazm):

A climax of sexual stimulation.

oropharynx (or-ŏ-FAR-ingks):

The oropharynx is a passageway for both air and food and borders the nasopharynx and the oral cavity.

orthopnea (or-THŌP-nē-ă):

Breathing is easier in a straight position.

osmosis (oz-MŌ-sīs):

A process by which molecules of a solvent tend to pass through a membrane from a less concentrated solution into a more concentrated one.

ostectomy (ŏs-TĒK-tō-mē):

Excision of bone.

osteoarthritis (ă-stē-ō-ăr- 'thrī-təs):

Inflammation of bone and joint.

osteoblast (OS-tē-ō-blast):

Developing bone cell.

osteochondritis (os-tē-ō-kon-DRĪT-īs):

Inflammation of bone and cartilage.

osteoclast (ŏs-tē-ō-KLĀ-sis):

Surgical breaking of a bone.

osteocyte (OS-tē-ŏ-sīt):

Bone cell.

osteomalacia (os-tē-ō-mă-LĀ-sh-ē-ă):

Softening of the bones.

osteomyelitis (os-tē-ō-mī-ĕ-LĪT-īs):

Inflammation of bone and bone marrow.

osteonecrosis (os-tē-ō-nĕ-KRŌ-sīs):

Abnormal condition of bone death (lack of blood supply).

osteopenia (os-tē-ō-PĒ-nē-ă):

Abnormal reduction of bone mass.

osteopetrosis (ŏs-tē-ō-pĕ-TRŌ-sīs):

Abnormal condition of stone-like bones.

osteosarcoma (ŏs-tē-ō-săr-KŌ-mă):

Malignant tumor of bone.

otalgia (ŏ-TĀL-jĕ-ă):

Pain in the ear.

otologist (ŏ-TŌL-ŏ-jĭst):

Specialist who studies and treats disorders and diseases of the ear.

otology (ŏ-TŌL-ŏ-jĕ):

Study of the ear.

otomastoiditis (ŏ-tō-mas-toyd-ĪT-īs):

Inflammation of the ear and mastoid bone.

otomycosis (ō-tō-mī-KŌ-sīs):

Abnormal condition of fungus in the ear.

otopyorrhoea (ō-tō-pī-ō-RĒ-ă):

Discharge of pus from the ear.

otorhinolaryngologist (ō-tō-RĪ-nō-lăr-ĭn-GŎL-ō-jĭst):

Specialist or physician who studies and treats disease and disorder of the ears, nose and throat.

otorrhea (ō-tō-RĒ-ă):

Discharge from the ear.

otosclerosis (ō-tō-skĕ-RŎ-sīs):

Hardening of the ear.

otoscope (Ŏ-tō-skŏp):

Instrument used to view the ear.

otoscopy (ō-TŎS-kŏ-pĕ):

Process of viewing the ear.

ovarian cancer (ō-VAR-ĕ-ăn KAN-sĕr):

Malignant tumor of the ovary.

ovaries (Ŏ-vă-rĕs):

Two almond shaped organs (female gonads) located at the entrance to the fallopian tubes; responsible for storing of egg cells (ova) and production of estrogen and progesterone hormones.

ovulation (ov-yŭ-LĂ-shŏn):

Release of ovum from a mature graafian follicle.

ovum (ova) (Ŏ-vŭm):

Female egg cells.

oximeter (ok-SIM-ĕt-ĕr):

Instrument used to measure oxygen.

oxytocia (ok-si-TŎ-sia):

A rapid birth.

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P

pacemaker (PĀS-māk-ēr):

An electronic implant that initiates a heart beat.

pachyderma (pak-ē-DĒR-mă):

Thickening of the skin.

Pacinian corpuscle (pă-SIN-ē-ăn KOR-pūs-ěl):

Lamellated corpuscle that responds to vibration.

palatine tonsils (PAL-ă-tĭn TON-sĭls):

A pair of soft tissue masses located at the rear of the throat (pharynx).

palatitis (pal-ă-TĪT-ĭs):

Inflammation of the palate.

palatoplasty (PĀL-ăt-ō-plās-tē):

Surgical repair of the palate.

pallor (PĀL-or):

Paleness.

palpate (PAL-pāt):

Physical examination technique:

The examiner feels for texture, size, consistency and location of body parts with hands.

palpitations (pāl-pĭ-Tā-shŭn):

A feeling in the chest that may be caused by an irregular heart rhythm.

pancreatic (pan-krē-AT-ĭk):

Pertaining to the pancreas.

pancreatitis (pan-krē-a-TĪT-ĭs):

Inflammation of the pancreas.

pancytopenia (pan-sĭt-ō-PĒ-nē-ă):

Abnormal reduction of (all) blood cells.

panhypopituitarism (pan-hĭ-pō-pĭ-TOO-ĭt-ă-rĭzm, -TŪ):

State of total deficient pituitary gland activity.

panplegia (păn-PLĒ-jē-ă):

Total paralysis.

papanicolaou smear (păp-ă-NĒ-kă-low smēr):

PAP test A smear method for examining cells, that is used to detect cancers of the cervix.

para (PĀR-ă):

A woman who has given birth to an offspring after 20 weeks, live or stillborn.

paracrine (par-ă-krin):

Chemical signal that elicits a response in neighboring cells; also called paracrine factor.

paraplegia (par-ă-PLĒ-j(ē-)ă):

Paralysis that affects both legs and lower part of the body.

parathyroidectomy (păr-ă-thī-royd-ĚK-tō-mē):

Excision of the parathyroid glands.

parathyroidoma (păr-ă-thī-royd-ō-MĀ):

Tumor of the parathyroid glands.

paresis (pă-RĒ-sīs):

Partial paralysis wherein there is still some control of the muscles.

paresthesia (par-es-THĒ-zh(ē-)ă):

Abnormal sensation in the extremities.

parietal lobe (pă-RĪ-ēt-ăl lōb):

Region of the cerebral cortex directly beneath the parietal bone of the cranium.

paronychia (păr-ō-NĪK-ē-ă):

Diseased state around the nail.

parturition (păr-tū-RĪSH-ŭn):

Act of giving birth.

passive immunity (PĀS-iv im-Ū-nīt-ē):

Transfer of immunity to a pathogen to an individual that lacks immunity to this pathogen usually by the injection of antibodies.

patellectomy (păt-ē-LĚK-tō-mē):

Excision of the knee cap.

pathogens (path-Ō-jĕns):

Disease-causing agents.

pelvic (PEL-vik):

Pertaining to pelvis, pelvic bone.

pelvic inflammatory disease (PID):

Inflammation of some or all of the female pelvic organs.

pelvic sonography (PEL-vik sō-NOG-ră-fē):

Process of recording sound pertaining to the pelvis.

pelvisacral (PEL-vīs-SĀ-krăl):

Pertaining to the pelvis and sacrum.

pelviscopic (pĕl-VĪS-kŭ-pĭk):

Pertaining to visual examination of the pelvic cavity.

pelviscopy (pĕl-VĪS-kŭ-pĕ):

Visual examination of the pelvic cavity.

penis (PĒ-nēz):

Male organ of copulation.

percutaneous (pĕr-kū-TĀ-nē-ūs):

Pertaining to through the skin.

perfusion (pĕr-FŪ-zhōn):

The delivery of blood to an area/tissue/organ.

pericardial fluid (per-ī-KAR-dē-āk FLOO-īd):

Pericardial fluid is a serous fluid which allow the 2 layers of serous pericardium to slide smoothly against each other as the heart beats.

pericardiocentesis (per-i-kard-ē-ō-sen-TĒ-sīs):

Surgical puncture to aspirate fluid from the (sac) surrounding the heart.

pericarditis (per-ī-kar-DĪT-īs):

Inflammation of the (sac) surrounding the heart.

pericardium (per-ī-KARD-ē-ūm):

Serous membrane surrounding the heart in the pericardial cavity and reduces friction between the heart and the wall of the pericardium.

perimetritis (per-ī-mē-TRĪT-īs):

Inflammation surrounding the uterus.

perimetrium (per-i-MĒ-trē-ūm):

The most superficial and serous layer of the uterus.

perineorrhaphy (pĕr-ī-nē-OR-ā-fē):

Suturing of (a tear in) the perineum.

peripheral arterial disease (pĕ-RIF-(ĕ-)rāl ar-TĒR-ē-āl diz-ĒZ’):

The obstruction of vessels in peripheral regions of the body.

peripheral nervous system (PNS) (pĕ-RIF-(ĕ-)rāl NĒR-vūs SIS-tēm):

Anatomical division of the nervous system that is largely outside the cranial and vertebral cavities, namely all parts except the brain and spinal cord.

peritoneal (per-īt-ō-NĒ-āl):

Pertaining to the peritoneum.

peritoneum (per-it-ō-NĒ-ūm):

Serous membrane surrounding several organs in the abdominopelvic cavity. This reduces friction between the abdominal and pelvic organs and the body wall.

peritonitis (per-īt-ō-NĪT-īs):

Inflammation of the peritoneum.

permeability (pĕr-mē-ā-BIL-īt-ē):

Membrane that causes it to allow liquids or gases to pass through it.

pH (P H):

pH is a measure of how acidic or alkaline a substance is, as determined by the number of free hydrogen ions in the

substance.

phacomalacia (fāk-ō-mă-LĀ-shē-ă):

Softening of the lens.

phagocytes (făg-ō-SĪTS):

Cells that engulf and absorb bacteria and cell particles.

phagocytized (FĀG-ō-sit-iz):

This is the process by which certain cells are able to 'eat' other cells or substances by engulfing them.

phagocytosis (făg-ō-si-TŌ-sīs):

Movement of material from the outside to the inside of the cells via vesicles made from invaginations of the plasma membrane.

phalangectomy (fāl-ăn-JĚK-tō-mē):

Excision of the phalanges.

pharyngeal (far-în-JĚ-ăl):

Pertaining to the pharynx.

pharyngeal tonsils (far-în-JĚ-ăl TON-sil):

A pharyngeal tonsil, also called an adenoid, is an aggregate of lymphoid reticular tissue similar to a lymph node that lies at the superior portion of the nasopharynx.

pharyngitis (far-în-JĪT-īs):

Inflammation of the pharynx.

pharyngotonsillitis (fă-ring-gō-ton-si-LĪT-īs):

Inflammation of the pharynx and tonsils.

pharynx (FAR-ingks):

The pharynx is a tube formed by skeletal muscle and lined by mucous membrane that is continuous with that of the nasal cavities.

phimosis (fi-MŌ-sīs):

A tightness of the prepuce (foreskin of the penis) that prevents its retraction over the glans penis. It may be congenital or the result of balanitis. Circumcision is the usual treatment.

phlebectomy (fleb-EK-tō-mē):

Excision of a vein.

phlebitis (flĕ-BĪT-īs):

Inflammation of a vein.

phlebotomist (flĕ-BŎT-ō-mĭst):

A specially trained person who draws blood or injects IV fluids.

phlebotomy (flĕ-BOT-ō-mē):

Incision into a vein.

photophobia (fō-tō-FŎ-bē-ă):

Sensitivity to light.

phrenospasm (FRĒN-ō-spāzm):

Spasm of the diaphragm.

pia mater (PĪ-ă MĀT-ēr):

Thin, innermost membrane of the meninges that directly covers the surface of the CNS.

placenta (plă-SENT-ă):

The organ of gas and nutrient exchange between the baby and the mother.

placenta abruptio or abruptio placenta (plă-SENT-ă ă-BRŪP-shē-ō):

Occurs when the placenta prematurely becomes detached from the uterine wall. This is a medical emergency and requires an immediate c-section to save both the woman and infant's lives. The infant will not be getting oxygen from the mother and the mother may hemorrhage.

placenta previa (plă-SENT-ă PRĒ-vē-ă):

Occurs when the placenta partially or completely covers the cervical os (opening).

plaque (plak):

A fatty material including cholesterol, connective tissue, white blood cells, and some smooth muscle cells.

plasma cells (PLAZ-mă sels):

A type of B lymphocyte that produces antibodies which bind to specific foreign or abnormal antigens, in order to destroy them.

plasmapheresis (plăz-mă-fēr-Ē-sīs):

Removal of plasma.

pleura (PLOOR-ă):

Serous membrane which surrounds the lungs in the pleural cavity and reduces friction between the lungs and the body wall.

pleural effusion (PLOOR-ăl ě-FŪ-zhŭn):

Fluid in the pleural space (caused by disease or trauma).

pleuritic (ploo-RĪT-ĭk):

Pertaining to the pleura.

pleuritis (ploo-RĪ-tīs):

Inflammation of the pleura.

pneumatocele (nŭ-MĀT-ō-sĕl):

Hernia of the lung.

pneumoconiosis (noo-mō-kō-nĕ-Ō-sīs):

Abnormal condition of dust in the lungs.

pneumonectomy (noo-mō-NEK-tō-mĕ):

Excision of the lung.

pneumonia (noo-MŌN-yă):

Diseased state of lung.

pneumonitis (noo-mō-NĪT-īs):

Inflammation of the lung.

pneumothorax (noo-mō-THŌR-aks):

An excessive amount of air is present in the thoracic cavity, outside of the lungs, putting pressure on the lungs and interfering with venous return, pulmonary function, and delivery of oxygen to the tissues.

poliomyelitis (pō-lē-ō-mī-ēl-ĪT-īs):

Inflammation of gray matter of the spinal cord.

polyarteritis (pol-ē-art-ē-RĪT-īs):

Inflammation of many (sites in the) arteries.

polycystic ovary syndrome (PCOS) (pōl-ē-SĪS-tĭk Ō-vā-rē SĪN-drōm):

Condition typically characterized by hormonal imbalances, ovulatory dysfunction, and multiple ovarian cysts.

polycythemia (POL-ē-sī-THĒ-mē-ā):

A disorder in which too many red blood cells are produced.

polycythemia vera (pol-ē-sī-THĒ-mē-ā vēr-ā):

A type of bone marrow disease that causes an excessive production of immature erythrocytes.

polydipsia (pol-ē-DIP-sē-ā):

Condition of excessive thirst.

polyhydramnios (pōl-ē-hī-DRĀM-nē-ōs):

A condition where there is excessive amniotic fluid in the placenta. The delivery will be a c-section to prevent bleeding during delivery of the fetus.

polymenorrhea (pōl-ē-mēn-ō-RE-ā):

Excessive bleeding during one's period.

polymyositis (pol-ē-mī-ō-SĪ-tīs):

Inflammation of many muscles.

polyneuritis (pol-ē-noo-RĪT-īs):

Inflammation of many nerves.

polyneuropathy (pol-ē-noo-ROP-ā-thē):

Disease of many nerves.

polyp (POL-ĭp):

Small tumor like growth that extend from the surface of a mucous membrane.

polypectomy (pōl-ĭ-PĚK-tō-mē):

Excision of polyps.

polyposis (pōl-ē-PŌ-sīs):

Abnormal condition of (multiple) polyps.

polysomnography (PSG) (pol-ē-som-NOG-rā-fē):

Process of recording many (test) during sleep.

polyuria (pol-ē-ŪR-ē-ā):

Excessive urine.

pons (ponz):

Latin word meaning bridge, essential part of the brain located above the medulla, action in regulation and controls of vital functions primarily sleep, respiration, swallowing, bladder control, hearing, balance (equilibrium), taste, ocular movement, facial expression and sensation.

posterior (or dorsal) (pōs-TĒ-rē-or):

Describes the back or direction toward the back of the body.

posteriorly (pōs-TĒ-rē-or-lē):

Pertaining to behind.

postictal (post-ĪK-tāl):

Occurs after a seizure or attack.

postnatal (post-NĀT-āl):

Pertaining to after birth (reference to the newborn).

postpartum (pōst-PART-ūm):

After childbirth referring to the mother.

preeclampsia (prē-ĕ-KLAMP-sē-ă):

The abnormal condition in pregnancy where the patient experiences hypertension, edema and proteinuria.

prefix:

Word part at the beginning of a medical term that changes the meaning of the word root.

premature infant (prē-mă-CHŪR IN-fânt):

Infant born before completing 37 weeks of gestation (also called preterm infant).

premenstrual syndrome (prē-MĚN-stroo-ăl SĪN-drōm):

Syndrome involving physical and emotional symptoms occurring up to 10 days before menstruation. Symptoms include nervous tension, irritability, mastalgia, edema, and headache.

prenatal (prē-NĀT-āl):

Pertaining to before birth.

prepuce (PRĒ-pūs):

Flap of skin that forms a collar around, and thus protects and lubricates, the glans penis.

presbycusis (prez-bī-KŪ-sīs):

Hearing impairment occurring with age

priapism (PRĪ-ă-pizm):

Persistent, abnormal erection of the penis accompanied by pain and tenderness.

primary adaptive response (PRĪ-mă-rē ad-ap-TĪV ri-SPONS):

Immune system's response to the first exposure to a pathogen.

primary lymphoid organ (PRĪ-mă-rē LIM-foyd OR-găn):

Site where lymphocytes mature and proliferate, red bone marrow and thymus gland.

primigravida (prī-mī-GRAV-id-ă):

First pregnancy.

primipara (prī-MĪP-ă-ră):

First birth.

process (PROS-es):

In cells, an extension of a cell body; in the case of neurons, this includes the axon and dendrites.

proctologist (prok-TOL-ō-jīst):

Specialist who studies and treats diseases of the rectum.

proctology (prōk-TŌL-ō-jē):

Study of disease and disorders of the rectum.

proctoptosis (prōk-tōp-TŌ-sīs):

Prolapse of the rectum.

proctoscope (PRŌK-tă-skōp):

Instrument used to view the rectum.

proctoscopy (prōk-TŌS-kō-pē):

Process of viewing the rectum.

prolapse (PRŌ-laps):

Displacement of an organ or anatomic structure from its normal position.

proliferate (prō-LIF-ē-rāt):

Reproduce rapidly.

proliferation (prō-lif-ē-RĀ-shōn):

Rapid increase in numbers.

proprioception (prō-prē-ō-SĒP-shŭn):

Awareness of the position of the body in space

prostaglandins (prōs-tă-GLĀN-dĭn):

Any of a group of compounds with varying hormone-like effects.

prostate cancer (PROS-tăt KAN-sēr):

Cancer of the prostate gland.

prostate gland (PROS-tăt gland):

Doughnut-shaped gland at the base of the bladder surrounding the urethra and contributing fluid to semen during ejaculation.

prostatitis (pros-tă-TĪT-īs):

Inflammation of the prostate gland.

prostatocystitis (pros-tă-tō-sīs-TĪ-tīs):

Inflammation of the prostate gland and urinary bladder.

prostatolith (prōs-TĀT-ō-lĭth):

Stone(s) in the prostate gland.

prostatolithotomy (prōs-tăt-ō-lĭ-THŌT-ō-mē):

Incision into the prostate gland to remove stones.

prostatorrhoea (pros-tă-tō-RĒ-ă):

Discharge from the prostate gland.

prostatovesiculitis (pros-tă-tō-vē-sīk-ū-LĪ-tīs):

Inflammation of the prostate gland and seminal vesicles.

proximal (PROK-sī-māl):

Describes a position in a limb that is nearer to the point of attachment or the trunk of the body.

pruritus (proo-RĪT-ūs):

Itching.

pseudocyesis (soo-dō-sī-Ē-sīs):

False pregnancy.

pseudophakia (SOOD-ō-FĀ-kē-a):

Condition of fake lens.

pseudostratified (soo-dō-STRĀT-ī-fīd):

Consisting of closely packed cells which appear to be arranged in layers.

psoriasis (sō-RĪ-ă-sīs):

Chronic autoimmune disorder that results in patches of thick red skin with the appearance of silvery scales.

psychiatrist (sī-KĪ-ă-trīst):

Physician who studies and treats disorders of the mind.

psychiatry (sī-KĪ-ă-trē):

Specialist of the mind.

psychogenic (sī-kō-JEN-ik):

Originating in the mind.

psychologist (sī-KŌL-ō-jīst):

Specialist of the mind.

psychology (sī-KOL-ō-jē):

Study of the mind.

psychopathy (sī-KŌP-ă-thē):

Disease of the mind.

psychosis (sī-KŌ-sīs):

Abnormal condition of the mind.

psychosomatic (sī-kō-sō-MĀT-īk):

Pertaining to the mind and body.

puberty (PŪ-bērt-ē):

The period during which adolescents develop secondary sex characteristics and become capable of reproduction.

pubic (PŪ-bīk):

Pertaining to pubis.

pubofemoral (pū-bō-FĚM-or-āl):

Pertaining to pubic bone and femur.

puerpera (pū-ĚR-pě-rā):

Childbirth.

puerperal (pū-ĚR-pě-rāl):

Pertaining to immediately after childbirth.

puerperium (pū-ěr-PĚ-rē-ŭm):

Period from delivery until the reproductive organs return to normal (approximately six weeks).

pulmonary (PŮL-mō-ně-rē):

Pertaining to the lung(s).

pulmonary artery (PŮL-mō-ně-rē ART-ě-rē):

The pulmonary artery is the artery that arises from the pulmonary trunk.

pulmonary edema (PŮL-mō-ně-rē ě-DE-mā):

Fluid accumulation in alveoli and bronchioles (related to heart failure).

pulmonary embolism (PE) (PŮL-mō-ně-rē EM-bó-liizm):

A piece of a blood clot or other substance has broken free from its original location and traveled through the bloodstream to lodge in a smaller vessel in the lungs. This causes an obstruction in that vessel and hypoxia to the tissues supplied by that vessel.

pulmonary trunk (PŮL-mō-ně-rē trŭnk):

Very large artery referred to as a trunk, a term indicating that the vessel gives rise to several smaller arteries.

pupillary (PŮ-pī-lěr-ě):

Pertaining to pupil.

pupillometer (pū-pīl-ŎM-ě-těr):

Instrument used to measure the pupil.

pupilloscope (pū-pīl-ŎS-kōp):

Instrument used to view the pupil.

pustule (PŮS-tŭl):

Small elevation of the skin containing fluid.

pyelitis (pī-ě-LĪT-īs):

Inflammation of the renal pelvis.

pyelolithotomy (pī-ě-lō-lĭth-ŎT-ō-mě):

Incision into the renal pelvis.

pyelonephritis (pī-ě-lō-ně-FRĪT-īs):

Inflammation of the renal pelvis and the kidney.

pyeloplasty (PĪ-ě-lō-plās-tě):

Surgical repair of the renal pelvis.

pyloric sphincter (pī-LOR-ĭk SFINGK-těr):

A band of smooth muscle at the junction between the pylorus of the stomach and the duodenum of the small intestine.

pyloric stenosis (pī-LOR-īk stē-NŌ-sīs):

Narrowing of the pylorus or pyloric sphincter.

pyloromyotomy (pī-lor-ō-mī-OT-ō-mē):

Incision into the pyloric muscle (used to correct pyloric stenosis).

pyloroplasty (pī-LŌR-ō-plas-tē):

Surgical repair of the pylorus.

pyosalpinx (pī-ō-SĀL-pīnks):

Pus in the uterine/fallopian tube.

pyothorax (pī-ō-THŌ-rāks):

Pus in the chest cavity.

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Q

quadrate (KWŌD-rāt):

A square or rectangular shape.

quadriplegia (kwōd-rī-PLĒ-jē-ă):

Paralysis of four (limbs). Affects both arms, both legs and sometimes from the neck down.

quickenig (KWĪK-ĕn-ing):

First feeling of movement of the fetus in utero by the pregnant woman.

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R

rachiotomy (rā-kī-ŌT-ō-mē):

Incision into the vertebral column.

rachischisis (rā-KĪS-kī-sīs):

Fissure of vertebral column.

radial (RĀD-ē-āl):

Pertaining to radius.

radicotomy (rād-ī-KŌT-ō-mē):

Incision into a nerve root.

radiculitis (rā-dīk-ū-LĪ-tīs):

Inflammation of the nerve roots.

radiculopathy (rā-dīk-ū-LŌP-ā-thē):

Disease of the nerve roots.

radiography (rā-dē-OG-rā-fē):

Process of recording x-rays.

radiologist (rā-dē-ŌL-ō-jīst):

Physician who specializes in the diagnosis and treatment of disease using medical imaging.

radiology (rā-dē-ŌL-ō-jē):

Study of the use of radiant energy in diagnosing disease.

rebel:

Word part that does not fit within the language rules.

rectal (RĒK-tāl):

Pertaining to the rectum.

rectocele (REK-tō-sēl):

Protrusion of the rectum.

reflux (RĒ-flūks):

Abnormal backward flow.

renogram (RĒ-nō-gram):

Radiographic record of the kidney.

respiratory zone (rēs-PĪR-ā-tō-rē zōn):

The respiratory zone includes structures that are directly involved in gas exchange.

respirologist (res-pī-ROL-ō-jīst):

Specialist who studies and treats disease and disorders related to breathing.

respirology (rēs-pīr-ŌL-ō-jē):

The study of breathing disorders and disease.

response (ri-SPONS):

Nervous system function that causes a target tissue (muscle or gland) to produce an event as a consequence to stimuli.

reticulated (rĕ-TIK-yŭ-lāt-ĕd):

Net like.

retinal (RĚT-ĭ-nāl):

Pertaining to the retina.

retinoblastoma (ret-ĭn-ō-blas-TŌ-mă):

Tumor arising from a developing retinal cell.

retinopathy (ret-ĭn-OP-ă-thĕ):

Disease of the retina.

retinoscopy (ret-ĭn-OS-kŏ-pĕ):

Process of viewing the retina.

retrograde urogram (RE-trŏ-grād Ū-rŏ-grām):

Radiographic image of the urinary tract.

rhabdomyolysis (rab-dŏ-mĭ-OL-ĭ-sĭs):

Dissolution of a striated muscle.

rheumatoid arthritis (ROO-mă-toyd ar-THRĪT-ĭs):

An autoimmune disorder in which the body mounts an immune response against its own joint tissues, causing inflammation and damage to the joints.

rhinitis (rĭ-NĪ-tĭs):

Inflammation of the nasal cavity which can lead to rhinorrhea.

rhinomycosis (rĭ-nŏ-mĭ-KŌ-sĭs):

Abnormal condition of fungus in the nose.

rhinoplasty (RĪ-nŏ-plăs-tĕ):

Surgical repair of the nose.

rhinorrhagia (rĭ-nŏ-RĀ-jĕ-ă):

Rapid flow of blood from the nose.

rhinorrhea (rĭ-nŏ-RĒ-ă):

Excessive flow or discharge from the nasal cavity (runny nose).

rhizomeningomyelitis (rĭ-zŏ-mĕ-nĭn-gŏ-mĭ-ĕ-LĪ-tĭs):

Inflammation of the nerve root, meninges and spinal cord.

rhizotomy (rĭ-ZŌT-ŏ-mĕ):

Incision into a nerve root.

rhytidectomy (rit-ĭ-DEK-tŏ-mĕ):

Excision of the wrinkles.

rhytidoplasty (RĪT-ī-dō-plās-tē):

Surgical repair of wrinkles.

rickets (RIK-ěts):

A painful condition in children where bones are misshapen due to a lack of calcium, causing bow leggedness.

right lymphatic duct (rīt lim-FAT-ik dūkt):

Drains lymph fluid from the upper right side of body into the right subclavian vein.

robotic surgery (rō-BŎ- tīk SŪRJ-ě-rē):

Use of small surgical instruments attached to a computer and operated by the surgeon from a console several feet from the operating table.

roots of the great vessels:

The part of each great vessel (aorta, pulmonary trunk, inferior vena cava, superior vena cava) that connects to the base of the heart.

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S

sacral (SAK-räl, SĀ-kräl):

Pertaining to the sacrum.

sagittal plane (SĀJ-ī-täl plān):

Plane that divides the body or an organ vertically into left and right sides.

salpingectomy (sal-pīn-JEK-tō-mē):

Excision of the uterine/fallopian tube.

salpingitis (säl-pīn-JĪ-tīs):

Inflammation of a fallopian/uterine tube.

salpingo-oophorectomy (säl-pīng-gō-ō-ōf-ō-RĒK-tō-mē):

Excision of the uterine tube and ovary.

salpingostomy (säl-pīng-ŌS-tō-mē):

Creation of an artificial opening in the uterine tube.

sarcopenia (sär-kō-PĒN-ē-ä):

Abnormal reduction of connective tissue.

satellite cell (SĀT-l-īt sel):

Glial cell type in the PNS that provides support for neurons in the ganglia.

scar (skär):

Collagen-rich skin formed after the process of wound healing that differs from normal skin. Also known as a cicatrix.

Schwann cell (shvon sel):

Glial cell type in the PNS that provides the myelin insulation for axons in nerves.

sclerokeratitis (sklēr-ō-kēr-ä-TĪ-tīs):

Inflammation of the sclera and cornea.

scleromalacia (sklēr-rō-mā-LĀ-sē-ä):

Softening of the sclera.

sclerotomy (sklēr-ROT-ō-mē):

Incision into the sclera.

scoliosis (skō-lē-Ō-sīs):

Abnormal condition of (lateral) curved spine.

scrotum (SKRŌ-tūm):

External pouch of skin and muscle that houses the testes.

sebaceous gland (sē-BĀ-shūs gland):

Type of oil gland that is found all over the body and helps to lubricate and waterproof the skin and hair.

seborrhea (sēb-or-Ē-ā):

Discharge (excessive) of sebum.

secondary adaptive response (SĔK-ōn-dār-ē ad-ap-TĪV ri-SPONS):

Immune response observed upon re-exposure to a pathogen, which is stronger and faster than a primary response.

secondary lymphoid organs (SĔK-ōn-dār-ē LIM-foyd OR-gān):

Sites where lymphocytes mount adaptive immune responses, examples include lymph nodes and spleen.

semen (SĔ-mĕn):

Ejaculatory fluid composed of sperm and secretions from the seminal vesicles, prostate, and bulbourethral glands.

seminal vesicle (SĔM-ĭ-nāl VES-ĭ-kĕl):

Gland that produces seminal fluid, which contributes to semen.

seminiferous tubules (sĕm-ĭn-ĪF-ĕr-ūs TŪ-bŭls):

Tube structures within the testes where spermatogenesis occurs.

sensation (sen-SĀ-shŏn):

Nervous system function that receives information from the environment and translates it into the electrical signals of nervous tissue.

sepsis (SEP-sĭs):

Toxic condition due to spread of bacteria or their toxins from an infection.

septal cartilage (SEP-tŭm KART-ĭ-lāj):

The flexible portion you can touch with your fingers.

septoplasty (sĕp-tŏ-PLĀS-tĕ):

Surgical repair of the septum.

septotomy (sĕp-TŌT-ŏ-mĕ):

Incision into the (nasal) septum.

seroconversion:

The reciprocal relationship between virus levels in the blood and antibody levels. As the antibody levels rise, the virus levels decline, and this is a sign that the immune response is being at least partially effective (partially, because in many diseases, seroconversion does not necessarily mean a patient is getting well).

serous (SĔR-ŭs):

You may recall that serous membranes throughout the body are folded back on themselves, which results in a double-layered membrane separated by serous fluid. The serous membrane surrounding the lungs is called pleura. The serous membrane surrounding the abdominopelvic organs is called peritoneum.

serous membrane (serosa) (SĔR-ŭs MEM-brān):

Epithelial membrane composed of mesodermally derived epithelium (mesothelium) that is supported by connective tissue.

serous space (SĔR-ŭs spās):

Thin, fluid-filled space between the parietal and visceral layers of the serous membrane.

Sertoli cells (SERT-ō-lē sels):

Cells that support germ cells through the process of spermatogenesis; a type of sustentacular cell.

severe combined immunodeficiency disease (scid):

Genetic mutation that affects both t cell and b cell arms of the immune response.

sexually transmitted disease (STD) (SEKS-ū-ă-lē trāns-MĪT-ed diz-ĒZ):

Infection spread through sexual contact.

sialolith (sī-AL-ō-lith):

Stone in the salivary gland.

sickle cell disease:

A genetic disorder involving the production of an abnormal type of hemoglobin which delivers less oxygen to tissues and causes erythrocytes to assume a sickle (or crescent) shape.

sidestream smoke (SĪD-strēm smōk):

Some that is given off by the burning cigarette.

sigmoidoscopy (sig-moy-DOS-kō-pē):

Process of viewing the sigmoid colon.

silent mis:

A myocardial infarction without symptoms. The patient may not know that they are having an MI

sinus rhythm (SĪ-nūs Rith-īm):

This is the rhythm set by the heart's pacemaker, the sinoatrial node and is usually approximately 60-90 beats per minute in a resting adult

sinusitis (sī-nūs-Ī-tīs):

Inflammation of a sinus.

skeletal muscle (SKEL-ēt-ōn MŪS-ěl):

Skeletal muscles are responsible for voluntary muscle movement.

sleep apnea (slēp ap-NĒ-ă):

Chronic condition characterized by the cessation of breathing during sleep.

smooth muscle (MŪS-ěl):

Smooth muscle is mainly associated with the walls of internal organs. Smooth muscles are responsible for involuntary muscle movement.

soft palate (soft PAL-ăt):

The soft palate is located at the posterior portion of the nasal cavity and consists of muscle tissue.

solutes (SOL-ūt):

The minor component in a solution.

soma (SŌ-mă):

In neurons, that portion of the cell that contains the nucleus; the cell body, as opposed to the cell processes (axons and dendrites).

somatic nervous system (SNS) (sō-MAT-ik NĒR-vūs SIS-tēm):

Functional division of the nervous system that is concerned with conscious perception, voluntary movement, and

skeletal muscle reflexes.

sonogram (SON-ō-gram):

The record of sound.

sonography (sō-NOG-rā-fē):

Process of recording sound.

sonohysterography (SHG) (sō-nō-his-tē-ROG-rā-fē):

Process of recording the uterus by use of sound.

speculum (SPEK-yŭ-lŭm):

Instrument for opening a body cavity to allow visual inspection.

sperm (pl; spermatozoa) (spĕrm (pl; spĕr-măt-ō-ZŌ-ă):

Male gamete.

spermatic cord (spĕr-MĀT-ĭk kord):

Bundle of nerves and blood vessels that supplies the testes; contains ductus deferens.

spermatid (SPĔR-mă-tĭd):

Immature sperm cells produced by meiosis II of secondary spermatocytes.

spermatocoele (spĕr-MĀT-ō-sĕl):

Distention of the epididymis containing an abnormal cyst-like collection of fluid and sperm cells.

spermatocyte (spĕr-MĀT-ō-sĭt):

Cell that results from the division of spermatogonium and undergoes meiosis I and meiosis II to form spermatids.

spermatogenesis (spĕr-măt-ō-JĔN-ĕ-sĭs):

Formation of new sperm, occurs in the seminiferous tubules of the testes.

spermatogonia (spĕr-măt-ō-GŌ-nĕa):

Diploid precursor cells that become sperm (singular = spermatogonium).

spermatolysis (spĕr-măt-ŌL-ĭ-sĭs):

Dissolution (destruction) of sperm.

spermiogenesis (spĕr-mĕ-ō-JĔN-ĕ-sĭs):

Transformation of spermatids to spermatozoa during spermatogenesis.

sphincter (SFĪNK-tĕr):

A circular muscle constricting an orifice.

spinal cord (SPĪ-nāl kord):

Organ of the central nervous system found within the vertebral cavity and connected with the periphery through spinal nerves; mediates reflex behaviors.

spleen (splĕn):

Secondary lymphoid organ that filters pathogens from the blood (white pulp) and removes degenerating or damaged blood cells (red pulp).

splenectomy (splĕ-NEK-tō-mĕ):

Excision of the spleen,

splenomegaly (splē-nō-mē-GĀ-lē):

Enlarged spleen.

splenopexy (SPLĒ-nō-pĕk-sē):

Surgical fixation of the spleen.

sphygmomanometer (sfīg-mō-mān-ŌM-ēt-ēr):

Instrument used to measure blood pressure.

spirometer (spī-Rōm-ēt-ēr):

Instrument used to measure breathing (lung volume).

spirometry (spī-RŌM-ĕ-trē):

Measuring breathing (air flow).

spondylarthritis (spon-dil-ar-THRĪT-īs):

Inflammation of the vertebra and joint.

spondylosis (spōn-dī-LŌ-sīs):

Abnormal condition of the vertebrae.

sprain (sprān):

Injury to a joint whereby a ligament is stretched or torn.

sputum (SPŪT-ŭm):

Mucous secretion from lungs, bronchi, and trachea that is expelled through the mouth.

squamous cell carcinoma (SKWĀ-mŭs sel kar-sĭn-Ō-mă):

Cancer that affects the deratinocytes of the stratum spinosum and presents as lesions commonly found on the scalp, ears, and hands.

stapedectomy (stā-pĕ-DEK-tō-mē):

Excision of the stapes.

staphylococcus (staf-ĭ-lō-KOK-ŭs):

Berry-shaped bacterium in grapelike clusters.

Staphylococcus aureus (staf-ĭ-lō-KOK-ŭs):

Staphylococcus aureus is a bacterium that is commonly found in minor skin infections, as well as in the nose of some healthy people.

steatohepatitis (stē-ăt-ō-hep-ă-TĪT-īs):

Inflammation of the liver associated with fat.

steatorrhea (stē-ă-tō-RĒ-ă):

Discharge of fat.

steatosis (stē-ă-TŌ-sīs):

Abnormal condition of fat.

sterility (stĕ-RIL-ĭt-ē):

A condition of being unable to conceive or reproduce the species.

sterilization (ster-ĭ-lĭ-ZĀ-shŏn):

Procedure that prevents pregnancy, either a female's ability to conceive or a male's ability to induce conception.

sternoclavicular (stĕr-nŏ-klā-VĪK-ŭ-lār):

Pertaining to the sternum and clavicle.

sternoid (STĔR-noyd):

Resembling the sternum.

stethoscope (STETH-ŏ-skŏp):

Instrument used to hear internal body sounds.

stillborn (STIL-bŏrn):

An infant that is born dead.

stimulus (STĪM-ŭ-lŭs):

An event in the external or internal environment that registers as activity in a sensory neuron.

stoma (STŌ-mă):

Surgical opening between an organ and the surface of the body.

stomatitis (stŏ-mă-TĪT-ĭs):

Inflammation of the mouth.

stomatogastric (stŏ-mă-tŏ-GĀS-trĭk):

Pertaining to the mouth and stomach.

strain (strān):

Injury to a muscle whereby a tendon is stretched or torn.

stratified squamous epithelium (STRĀT-ĭ-fid SKWĀ-mŭs ep-i-THE-lĕ-ŭm):

Cells arranged in layers upon a basal membrane.

stratum basale (STRĀ-tŭm BĀS-al):

Deepest layer of the epidermal.

streptococcus (strep-tŏ-KOK-ŭs):

Berry-shaped bacterium in twisted chains.

stricture (STRIK-chŭr):

Abnormal narrowing.

stroke (strŏk):

Loss of neurological function caused by an interruption of blood flow to a region of the central nervous system.

sty (stĭ):

Infection of an oil gland of the eyelid (hordeolum).

stye (stĭ):

Acute infection of eyelash hair follicle.

subarachnoid space (sŭb-ă-RAK-noyd spās):

Space between the arachnoid mater and pia mater that contains CSF and the fibrous connections of the arachnoid trabeculae.

subcostal (sŭb-KOS-tāl):

Pertaining to below the ribs.

subcutaneous (sŭb-kŭ-TĀ-nē-ŭs):

Pertaining to under the skin.

subdural (sŭb-DŪ-rāl):

Pertaining to below the dura mater.

subdural hematoma (sŭb-DŪ-rāl hēm-ă-TŌ-mă):

Tumor filled with blood pertaining to below the dura mater.

sublingual (sŭb-LING-gwāl):

Pertaining to under the tongue.

submandibular (sŭb-măn-DĪB-ŭ-lār):

Pertaining to under the mandible.

submaxillary (sŭb-MĀK-sĭ-lēr-ē):

Pertaining to under the maxilla.

subscapular (sŭb-SKĀP-ŭ-lār):

Pertaining to below the scapula.

substernal (sŭb-STĚR-nāl):

Pertaining to below the sternum.

subungual (sŭb-ŬNG-gwāl):

Pertaining to under the nail.

suffix:

A word part added to the end of a word that changes the meaning of the word root.

sulcus/sulci (SŬL-kŭs/ SŬL-kĭ):

Groove formed by convolutions in the surface of the cerebral cortex; see fissure.

superficial (SOO-pěr-FISH-ăl):

Describes a position closer to the surface of the body.

superficial lymphatics (soo-pěr-FĪSH-ăl lim-FAT-iks):

Lymphatic vessels of the subcutaneous tissues of the skin.

superior (or cranial) (soo-PĚ-rē-or):

Describes a position above or higher than another part of the body proper.

superior vena cava (soo-PĚ-rē-or VĚ-nă KĀ-vă):

One of the two largest veins in the body. It carries deoxygenated blood from the head and upper extremities back to the heart.

suprapatellar (soo-pră-pă-TĚL-ăr):

Pertaining to above the knee cap.

suture (SOO-chŭr):

To stitch the edges of a wound.

sympathetic (sĭm-pă-THĚT-ĭk):

Flight or fight response.

sympathetic nervous system (sĭm-pă-THĚT-ĭk NĚR-vŭs SIS-tĕm):

Part of the nervous system that serves to accelerate heart rate, constrict blood vessels and raise blood pressure in response to stress. Responsible for fight or flight responses.

synapse (SĪN-ăps):

Narrow junction across which a chemical signal passes from neuron to the next, initiating a new electrical signal in the target cell.

synaptic end bulb (sĭ-NĂP-tĭk ende būlb):

Swelling at the end of an axon where neurotransmitter molecules are released onto a target cell across a synapse.

synarthrosis (sĭn-ăr-THRŌ-sĭs):

Joints with no movements.

syncope (SING-kŏ-pĕ):

Fainting.

syndrome (SĪN-drŏm):

Run together (signs and symptoms occur together characterizing of a specific disorder).

synovectomy (sĭn-ŏ-VĚK-tŏ-mĕ):

Excision of the synovial membrane.

synovial membrane (sĭn-Ō-vĕ-ăl MEM-brăn):

Connective tissue membrane that lines the cavity of a freely movable joint.

synoviosarcoma (sĭn-ŏ-vĕ-Ō-mă-sar-KŌ-mă):

Malignant tumor of the synovial membrane.

synthesis (Sĭn-thĕs-ĭs):

The production of chemical compounds by reaction from simpler materials.

syphilis (SIF-ĭ-lĭs):

A chronic bacterial disease spread primarily through sexual intercourse, but also congenitally by infection of a developing fetus. Rapidly spreads through the body and if left untreated becomes systemic.

systemic lupus erythematosus (sĭs-tĕm'ĭk loo'pŭs):

Autoimmune disease in which the immune system recognizes its own cell antigens as being “non-self” and mounts an immune response against them. As a result, many body tissues and vital organs become chronically inflamed and damaged.

systole (SIS-tŏ-lĕ):

Phase in cardiac cycle when ventricles contract and eject blood.

systolic pressure (SIS-tŏ-lik):

The systolic pressure is the higher value (typically around 120 mm Hg) and reflects the arterial pressure resulting from the ejection of blood during ventricular contraction, or systole.

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T

T cell (T sel):

Lymphocyte that acts by secreting molecules that regulate the immune system or by causing the destruction of foreign cells, viruses, and cancer cells.

tachycardia (tak-ē-KARD-ē-ā):

Condition of a fast heart (rate).

tachypnea (tak-i(p)-NĒ-ā):

Rapid breathing.

tarsectomy (tar-SEK-tō-mē):

Excision of the tarsal.

temporal lobe (TEM-p(ō)-rāl lōb):

Region of the cerebral cortex directly beneath the temporal bone of the cranium.

tendinitis (ten-dī-NĪT-īs):

Inflammation of the tendon.

tenomyoplasty (tĕn-ō-MĪ-ō-plās-tē):

Surgical repair of the tendon and muscle.

tenorrhaphy (tĕn-OR-ā-fē):

Suturing of a tendon.

tenosynovitis (ten-ō-sin-ō-VĪT-īs):

Inflammation of the tendon and synovial membrane.

teratogen (tĕ-RAT-ō-jĕn):

Agent producing malformations (in a developing embryo) such as chemicals, viruses and environmental factors.

teratogenic (tĕ-rat-ō-JĔN-ĭk):

Producing malformations.

teratology (tĕr-ā-TŌL-ō-jĕ):

The study of malformations.

term built from word parts:

Term that can be translated literally to find their meaning.

term NOT built from word parts:

Term that cannot be translated literally.

testes (TĔS-tĕs):

Male gonads (singular = testis).

testicular cancer (tĕs-TĪK-ū-lār KAN-sĕr):

Cancer of the testicle.

testicular torsion (tĕs-TĪK-ŭ-lār TOR-shŏn):

Twisting of the spermatic cord causing decreased blood flow to the testis. Considered a surgical emergency and accompanied by sudden onset of severe scrotal pain.

thalamus (THĀL-ă-mŭs):

Major region of the diencephalon that is responsible for relaying information between the cerebrum and the hindbrain, spinal cord, and periphery.

thalassemia (thal-ă-SĒ-mĕ-ă):

An inherited condition typically occurring in individuals from the Middle East, the Mediterranean, African, and Southeast Asia, in which maturation of the RBCs does not proceed normally. The most severe form is called Cooley's anemia.

thermoreceptors (thĕr-mŏ-rĕ-SĔP-tor):

Specialized neurons that respond to changes in temperature.

thoracalgia (thŏ-rāk-ĀL-jĕ-ă):

Pain in the chest.

thoracentesis (thŏ-ră-sen-TĒ-sĭs):

Surgical puncture to aspirate fluid from chest cavity.

thoracic (thŏ-RĀS-ĭk):

Pertaining to the chest.

thoracic duct (thŏ-RĀS-ĭk dŭkt):

Large duct that drains lymph from the lower limbs, left thorax, left upper limb, and the left side of the head.

thoracocentesis (thŏ-ră -kŏ-sen-TĒ-sĭs):

Surgical puncture to aspirate fluid (from the chest cavity).

thoracoscope (thŏ-RĀ-kŏ-skŏp):

Instrument used to visualize the chest cavity.

thoracoscopy (thŏ-ră-KŌS-kŏ-pĕ):

Visual examination of the chest cavity.

thoracotomy (thŏ-rāk-ŌT-ŏ-mĕ):

Incision into the chest cavity.

tract (trakt):

Bundle of axons in the central nervous system having the same function and point of origin.

thrombocytes (THRŌM-bŏ-sĭts):

These are cell fragments that aid in blood clotting.

thrombocytopenia (throm-bŏ-sĭt-ŏ-PĒ-nĕ-ă):

Abnormal reduction of (blood) clotting cells.

thrombocytosis (THRŌM-bŏ-sĭ-tŏ-sĭs):

A condition in which there are too many platelets.

thrombolysis (throm-BOL-ĭ-sĭs):

Dissolution of a (blood) clot.

thrombophlebitis (throm-bō-flē-BĪT-īs):

Inflammation of a vein associated with a (blood) clot.

thrombosis (throm-BŌ-sīs):

Formation of unwanted blood clots.

thrombus (THROM-būs):

(blood) clot (attached to the interior wall of artery or vein).

thymectomy (thī-MĚK-tō-mē):

Excision of the thymus gland.

thymocytes (THĪ-mō-sīt):

Lymphocytes that develop into T-cells in the thymus gland.

thymoma (thī-MŌ-mă):

Tumor of the thymus gland.

thymus (THĪ-mūs):

Primary lymphoid organ, where t lymphocytes proliferate and mature.

thyroidectomy (thī-royd-EK-tō-mē):

Excision of the thyroid gland.

thyroiditis (thī-royd-ĪT-īs):

Inflammation of the thyroid gland.

thyroidotomy (thī-royd-ŌT-ō-mē):

Incision into the thyroid gland.

thyroparathyroidectomy (thī-rō-par-ă-thī-royd-EK-tō-mē):

excision of the thyroid gland and parathyroid glands.

tibial (TĪB-ē-ăl):

Pertaining to the tibia.

tinea (TIN-ē-ă):

A group of fungal skin diseases, characterized by itching, scaling, and sometimes painful lesions.

tissue (TISH-oo):

Group of many similar cells that work together to perform a similar function.

tissue membrane (TISH-oo MEM-brān):

Thin layer or sheet of cells that covers the outside of the body, the organs, internal passageways that lead to the exterior of the body, and the lining of the movable joint cavities.

tissue rejection (TISH-oo rĕ-JEK-shŏn):

The recipient's immune system recognizes the transplanted tissue, the graft, as non-self and mounts an immune response against it, ultimately destroying it.

tissue typing (TISH-oo TĪP-ĭng):

The determination of MHC molecules in the tissue to be transplanted to better match the donor to the recipient.

tomography (tō-MOG-rā-fē):

Process of recording slices.

tonometer (tō-NOM-ēt-ēr):

Instrument used to measure pressure (within the eye).

tonometry (tō-NOM-ē-trē):

Process of measuring pressure (within the eye).

tonsillectomy (tōn-sil-ĒK-tō-mē):

Excision of the tonsils.

tonsillitis (tōn-sil-Ī-tīs):

Inflammation of the tonsils.

tonsils (TON-sīls):

Lymphoid nodules associated with the nasopharynx.

toxic shock syndrome:

Severe illness characterized by high fever, rash, vomiting, diarrhea, and myalgia followed by hypotension and, in severe cases, shock and death. Typically occurs in women using tampons and caused by *Staphylococcus aureus* and *Streptococcus pyogenes*.

trachea (TRĀ-kē-ā):

The trachea (windpipe) extends from the larynx toward the lungs.

tracheitis (trā-kē-Ī-tīs): Inflammation of the trachea.

trachelectomy (trak-ĕ-LEK-tō-mē):

Excision of the cervix.

trachelorrhaphy (trā-kĕl-OR-ă-fē):

Suturing of the cervix.

tracheoplasty (TRĀ-kē-ō-plās-tē):

Surgical repair of the trachea.

tracheostenosis (trā-kē-ō-stĕn-Ō-sīs):

Narrowing of the trachea.

tracheostomy (trā-kē-ŌS-tō-mē):

Creation of an artificial opening into the trachea.

transdermal (trānz-DĒRM-āl):

Pertaining to through the skin.

transient ischemic attack (TIA) (TRAN-zĕ-ĕnt is-KĒ-mē-ă ħ-TAK):

Temporary disruption of blood flow to the brain in which symptoms occur rapidly but last only a short time.

transurethral (trans-ū-RĒ-thrāl):

Pertaining to through the urethra.

transurethral incision of the prostate gland (TUIP):

Surgical procedure that widens the urethra by making a few small incisions in the bladder neck and the prostate gland.

transurethral microwave thermotherapy (TUMT):

Treatment that eliminates excess tissue present in benign prostatic hyperplasia by using heat generated by microwave.

transurethral resection of the prostate gland (TURP):

Surgical removal of pieces of the prostate gland tissue by using an instrument inserted through the urethra.

transverse plane (trăns-VĚRS plān):

Plane that divides the body or organ horizontally into upper and lower portions.

trichomoniasis (trĭk-ō-mō-NĪ-ă-sĭs):

Sexually transmitted disease caused by the one-cell organism Trichomonas. Chiefly affects the urinary tract, vagina, or digestive system.

tubal ligation (TOO-bāl li-GĀ-shŏn):

Surgical closure of the fallopian tubes for sterilization.

tympanic membrane (tĭm-PĀN-ĭk MEM-brān):

Ear drum.

tympanometer (tĭm-pā-NŌM-ĕ-tēr):

Instrument used to measure the middle ear.

tympanometry (tĭm-pā-NŌM-ĕ-trē):

Measurement of the tympanic membrane.

tympanoplasty (tĭm-pān-ō-PLĀS-tē):

Surgical repair of the tympanic membrane.

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U

ulnoradial (ŭl-nŏ-RĀD-ĕ-ăl):

Pertaining to the ulna and nerve root.

ungual (ŨNG-gwăl):

Pertaining to the nail.

unilateral (ŭ-nĭ-LĀT-ĕr-ăl):

Pertaining to one side.

unipolar (ŭ-nĭ-PŌ-lār):

Shape of a neuron which has only one process that includes both the axon and dendrite.

upper respiratory infection ((ŨP-er RES-pĭr-ă-tŏ-rĕ ĩn-FEK-shun):

Infection of the nasal cavity, pharynx and larynx cause by a virus.

ureterectomy (ŭ-rĕ-tĕr-ĔK-tŏ-mĕ):

Excision of the ureter.

ureteritis (ŭ-rĕ-tĕr-Ī-tĭs):

Inflammation of the ureter.

ureterocele (ŭ-RĔ-tĕr-ŏ-sĕl):

Protrusion of a ureter.

ureterolithiasis (ŭ-rĕ-tĕr-ŏ-lĭth-Ī-ăs-ĭs):

Condition of stone(s) in the ureter.

ureteroscopy (ŭ-RĔT-ĕ-rŏ-skŏp):

Visual examination of the ureter(s).

ureterostomy (ŭ-rĕ-tĕr-ŎS-tŏ-mĕ):

Creation of an artificial opening into the ureter.

ureterstenosis (ŭ-rĕ-tĕr-stĕ-NŎ-sĭs):

Narrowing of the ureter.

urethritis (ŭr-ĕ-THRĪT-ĭs):

Inflammation of the urethra.

urethrocystitis (ŭ-rĕ-thrŏ-sĭs-TĪ-tĭs):

Inflammation of the urethra and the bladder.

urinal (Ũ-rĭn-ăl):

Receptacle for urine.

urinary (Ũ-rĭ-nār-ĕ):

Pertaining to urine.

urogram (Ũ-rŏ-grām):

Radiographic image of the urinary tract.

urologist (ū-RŌL-ō-jīst):

Physician who studies and treats diseases of the urinary tract.

uterine fibroid (ŪT-ě-rīn FIB-royd):

Benign tumor of the uterine muscle.

uterine prolapse (ŪT-ě-rīn PRŌ-laps):

Downward displacement of the uterus into the vagina.

uterus (ŪT-ě-rūs):

A muscular organ that nourishes and supports the growing embryo; its functions are menstruation, pregnancy, and labor.

uvula (Ū-vyŭ-lā):

The uvula is a small bulbous, teardrop-shaped structure located at the apex of the soft palate.

uvulectomy (ū-vyŭ-LEK-tō-mē):

Excision of the uvula.

uvulitis (ū-vyŭ-LĪT-īs):

Inflammation of the uvula.

uvulopalatopharyngoplasty (UPPP) ((ū-vyŭ-lō-pal-ăt-ō-fă-RING-gō-plās-tē):

Surgical repair of the uvula, palate, and pharynx.

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V

vaccine (vak-SĔN):

A killed or weakened pathogen or its components that, when administered to a healthy individual, leads to the development of immunological memory (a weakened primary immune response) without causing much in the way of symptoms.

vagina (vǎ-JĪ-nǎ):

A muscular canal approximately 10 cm long that is the entrance to the reproductive tract; it also serves as the exit from the uterus during menses and childbirth.

vaginal (VAJ-ĭn-ǎl):

Pertaining to the vagina.

vaginal birth following a c-section:

Having a vaginal delivery after a previous c-section delivery.

vaginal fistula (VAJ-ĭn-ǎl FIS-chŭ-lǎ):

Abnormal opening between the vagina and another organ, such as the urinary bladder, colon, or rectum.

vaginitis (vaj-ĭ-NĪT-ĭs):

Inflammation of the vagina.

vaginosiis (vaj-ĭ-NŌ-sĭs):

Abnormal condition of the vagina.

valvulitiis (val-vyŭ-LĪT-ĭs):

Inflammation of a valve.

valvuloplasty (VAL-vyŭ-lŏ-plas-tĕ):

Surgical repair of a valve.

varicocele (VAR-iŏ-sĕl''):

Enlarged veins of the spermatic cord.

vascularized (VAS-kyŭ-lǎ-rĭzd):

Has numerous blood vessels.

vasectomy (vǎ-SEK-tŏ-mĕ):

Excision of a duct.

vasoconstrict (vǎ-zŏ-kŏn-STRIK):

The smooth muscle layer in the blood vessel wall contracts, causing the vessel diameter to narrow. This increases blood pressure in the vessel.

vasodilate (vǎ-zŏ-dĭ-LĀT):

The smooth muscle layer in the wall of the blood vessel relaxes, allowing the vessel to widen. This decreases blood pressure in the vessel.

vasodilation (vǎ-zŏ-dil-ǎ-TĀ-shŏn):

The smooth muscle layer in the wall of the blood vessel relaxes, allowing the vessel to widen. This decreases blood

pressure in the vessel.

vasovasostomy (vā-zō-vā-ZOS-tō-mē):

Creation of an artificial opening between ducts (restores fertility to males who have had a vasectomy).

vein (vān):

Blood vessels that carry blood back to the heart.

venogram (VĒ-nō-gram):

Radiographic image of a vein.

ventilator (VENT-ī-lāt-ōr):

Mechanical device that assist with breathing.

ventricle (VEN-tri-kēl):

Central cavity within the brain where CSF is produced and circulates.

venules (VEN-ūls):

Extremely small veins.

verruca (vēr-ROO-kā):

Also known as a wart. An epidermal growth caused by a virus.

vertebrocostal (vēr-tē-brō-KŌS-tāl):

Pertaining to vertebrae and ribs.

vertebroplasty (VER-tē-brō-plas-tē):

Surgical repair of the vertebral column.

vesicotomy (vēs-ī-KŌT-ō-mē):

Incision into the bladder.

vesicovaginal (vēs-ī-kō-VĀJ-ī-nāl):

Pertaining to the bladder and the vagina.

vesiculectomy (vē-sik-yŭ-LEK-tō-mē):

Excision of the seminal vesicle.

vessel compliance (VES-ēl kŏm-PLĪ-āns):

The ability of any compartment to expand to accommodate increased content. The greater the compliance of an artery, the more effectively it is able to expand to accommodate surges in blood flow without increased resistance or blood pressure.

vestibular (ves-TIB-yŭ-lār):

Pertaining to the vestibule.

vestibulocochlear (ves-tī-bŭl-ō-KŌ-klē-ar):

Pertaining to the vestibule and cochlea.

virus (VĪ-rŭs):

Minute microorganism that may cause infection by invading body tissue.

visceral (VĪS-ēr-āl):

Pertaining to internal organs.

visceral layer (VĪS-ēr-āl LĀ-ēr):

Layer of serous membrane which covers the organs (viscera).

viscosity (vis-KOS-īt-ē):

The thickness of fluids that affects their ability to flow.

visual acuity (VIZH-u-āl ā-KŪ-īt-ē):

Sharpness of vision.

void (VOYD):

Empty or evacuate waste material, urinate.

voiding (VOYD-ing):

Excrete (waste matter).

vulva (VŪL-vā):

External genitals of the female including the mons pubis, labia majora, labia minora, clitoris, urinary meatus, and vaginal opening.

vulvectomy (vŭl-VĔK-tō-mē):

Excision of the vulva.

vulvovaginal (vŭl-vō-VĀJ-ī-nāl):

Pertaining to the vulva and vagina.

vulvovaginitis (vŭl-vō-vāj-ī-NĪ-tīs):

Inflammation of the vulva and vagina.

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W

Wernicke's area (VER-nīk-ě AR-ē-ă):

Region at the posterior end of the lateral sulcus in which speech comprehension is localized.

wheal and flare response:

A soft, pale swelling at the site surrounded by a red zone. (A wheal is also known as a “hive”).

white matter (hwīt MAT-ěr):

Regions of the nervous system containing mostly myelinated axons, making the tissue appear white because of the high lipid content of myelin.

word root:

The foundational meaning of a word.

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X

xeroderma (zer-ō-DĒR-mă):

Dry skin.

xerophthalmia (zer-of-THAL-mē-ă):

Condition of dry eye.

xerosis (zĕ-RŌ-sīs):

Abnormal condition of dryness.

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Z

zygote (ZĪ-gōt):

Process of fertilization is complete and results in a single-celled diploid zygote with all the genetic instructions it needs to develop into a human.

zygote intrafallopian transfer (ZIFT):

Mixing of the ova and sperm in a laboratory. Fertilization is confirmed to grow into zygotes and then are inserted into the Fallopian tubes.

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