

Medical Terminology and Anatomy Review



Objectives

- Word elements
- Diagnostic and procedural terms
- Anatomy



Medical Terminology

PRN

pro re nata

When necessary



Word Elements

- Word Root
 - Derm/o – skin
 - Splen/o – spleen
- Compound Words
 - Cardiovascular
 - Cardi/o – heart
 - Vascul/o – vessel
 - Nephrolithiasis
 - Nephro/o – kidney
 - Lith – calculus or stone



Word Elements

- Prefix – beginning of a word
 - Tri – three
 - Cyan - blue
- Suffix – end of word
 - ectomy – excision, surgical removal
 - itis - inflammation



Anatomy & Physiology

- Anatomy – structure of the body parts and their relationship to each other
- Physiology - function of the body and how the body parts work to carry out their life-sustaining activities



Anatomy

- Organ – Multiple tissue types formed together to perform a specific function for the body.
- Organ System – A collection of body parts depending on one another to achieve a mutual objective.

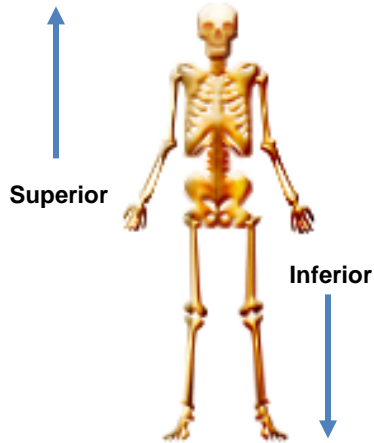


Anatomy

- Integumentary
- Musculoskeletal
- Cardiovascular
- Lymphatic
- Respiratory
- Digestive
- Urinary
- Reproductive
- Nervous
- Organs of Sense (Eye, Ear)
- Endocrine
- Hematologic
- Immune



Anatomical Position



Application to Documentation

The tumor was photographed and then using a standard 24 French cutting loop the tumor was resected; the solid portion was resected from the superior portion down to the inferior portion.

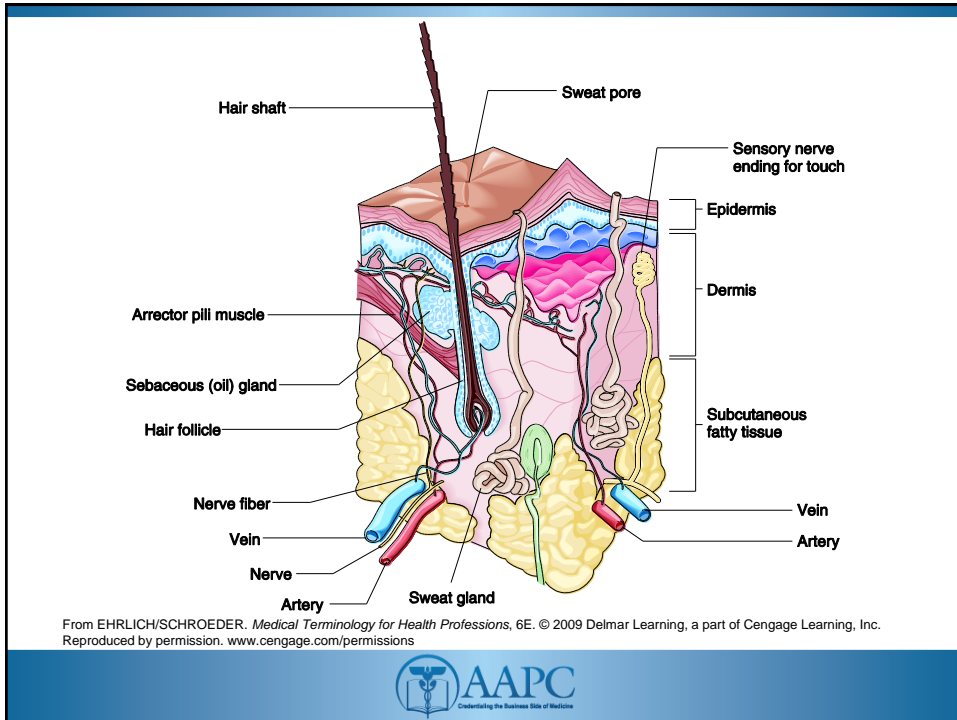


Integumentary System

- Skin
- Hair
- Nails

- CPT® - includes Breasts in the Integumentary System





Integumentary System

11042 Debridement, **subcutaneous tissue** (includes epidermis and dermis, if performed); first 20 sq cm or less

(for debridement of skin [i.e., **epidermis** and/or **dermis** only], see 97597, 97598)

Nail Unit

- Root
- Nail bed
- Nail plate
- Eponychium
- Perionychium
- Hyponychium



Musculoskeletal System

- System of
 - Bones
 - Muscles
 - Joints
 - Tendons
 - Ligaments
- Provides
 - Movement
 - Strength
 - Form
 - Protection
 - Heat



Bones

- Long (tubular) – longer than they are wide
- Short (cuboidal) – shaped like a cube
- Sesamoid – shaped like a sesame seed
- Flat – cross-section is flat
- Irregular – bones that do not fit in other categories



Cartilage and Joints

- Cartilage
 - Flexible connective tissue
 - Matrix made of chondrocytes, collagen, and cells
- Joints (articulating surfaces)
 - Provide connection between two or more parts of the skeleton



Human Skeleton

- Axial Skeleton
 - Skull
 - Spine
 - Ribs
 - Sternum
 - Sacrum
- Appendicular Skeleton
 - Shoulder girdle
 - Pelvic girdle
 - Extremities



Muscles

- Function
 - Contractility
 - Form
 - Heat
- Types
 - Skeletal
 - Cardiac
 - Smooth



Cardiovascular System

- Heart
 - Epicardium
 - Myocardium
 - Endocardium
- Blood Vessels
 - Arteries
 - Veins
 - Capillaries

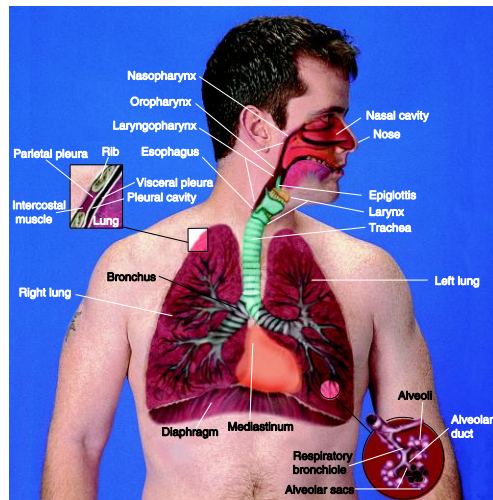


Lymphatic System

- Lymph vessels and nodes
- Collects excess fluid and returns it to the heart
- Valves ensure fluid travels in one direction
- Lymphoid organs:
 - Spleen
 - Thymus
 - Tonsils
 - Peyer's Patches



Respiratory System (Pulmonary System)



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Digestive System

- Feeding tube begins in the mouth, ends at the anus
- Mechanically and chemically breaks down food into minuscule or molecular size



Stomach

- Cardiac orifice – opening to the stomach
- Fundus – rounded upper portion
- Body – main portion
- Pyloric antrum – lower portion



Small Intestine

- Duodenum
- Jejunum
- Ileum



Large Intestine

- Cecum
- Colon
 - Ascending
 - Transverse
 - Descending
 - Sigmoid
- Rectum
- Anal Canal



Large Intestine

- Endoscopy
 - Proctosigmoidoscopy – rectum, sigmoid colon
 - Sigmoidoscopy – rectum, sigmoid colon, a portion of the descending colon
 - Colonoscopy – entire colon from rectum to the cecum



Urinary System

- Urine production
 - Excrete metabolic waste
 - Fluid and electrolyte balance
- Structures
 - Kidneys
 - Ureters
 - Urinary bladder
 - Urethra



Reproductive Systems

- Female Genitalia
 - External
 - Vulva
 - Labia majora and minora
 - Clitoris
 - Introitus Opening of the urethra or urinary meatus
 - Skene's glands
 - Bartholin's glands
 - Internal
 - Vagina
 - Uterus
 - Fallopian tubes
 - Ovaries
- Male Genitalia
 - External
 - Testes
 - Epididymis
 - Scrotum
 - Penis
 - Internal
 - Prostate gland, seminal vesicles, and Cowper's glands
 - Vas Deferens, ejaculatory duct, and urethra



Nervous System

- Central Nervous System (CNS)
 - Brain
 - Spinal Cord
- Peripheral Nervous System (PNS)
 - Cranial nerves
 - Spinal nerves



Nervous System

- Functions as central operator and central intelligence for the body
 - Regulates body function
 - Provides for an internal method of communication
 - Regulates subconscious body functions (respiratory rate, body temperature, peristalsis of intestines)
 - Sends signals when hot, cold, or sharp objects are encountered



Sensory Organs - Eye

- Sense organ of sight
- Layers
 - Retina (nervous)
 - Choroid (vascular)
 - Sclera (fibrous)



Sensory Organs - Eye

- Two segments divided by Crystalline Lens
- Anterior segment
 - Filled with aqueous humor
 - Responsible for intraocular pressure
- Posterior segment
 - Filled with vitreous humor
 - Prevents the eyeball from collapsing



Sensory Organs - Ear

- Senses
 - Hearing
 - Equilibrium
- Divisions
 - Outer ear (external ear)
 - Middle ear (tympanic cavity)
 - Inner ear (labyrinth)



Sensory Organs - Ear

- Eustachian tube – connects each middle ear to the throat.
- Otology
 - Audiometry Services
 - Surgical Services



Endocrine System

- Comprised of glands
- Glands
 - Group of cells that secrete or excrete hormones
 - Can be found in a variety of locations
 - Each gland and its associated hormone has a cause and effect that is unique.



Hemic System

- Red Cells (erythrocytes)
- White Cells (leukocytes)
- Platelets (thrombocytes)



Immune System

- Classified as a separate system from the hematologic system - most immune cells have their origin in the hematologic system
- Human immune system - body's defense against invading microorganisms, harmful chemicals, and foreign bodies



Immune System

- Two kinds of immune cells (lymphocytes)
 - B-cells
 - T-cells
- Protection cells
 - Neutrophils, lymphocytes, monocytes, eosinophils, basophils



Immune System

- Antigen
 - Elicit an immune response in the body
 - Types of antigens
 - Inhaled macromolecules
 - Ingested macromolecules
 - Molecules introduced beneath the skin
- Antibodies
 - Immune system-related proteins called immunoglobins



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