

Medical Terminology

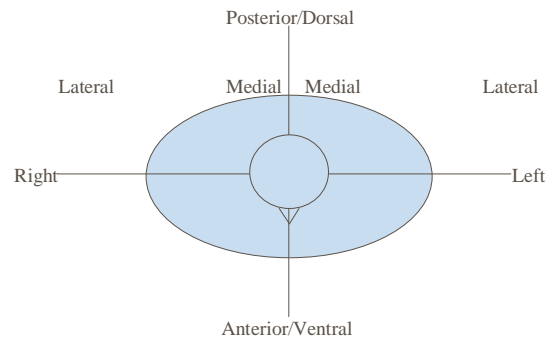
Unit 9
Anatomic Terms

Anatomy

- Ana/tomy comes from Greek word *anatomé* meaning cutting apart.
- Anatomy is the study of naming body structures.

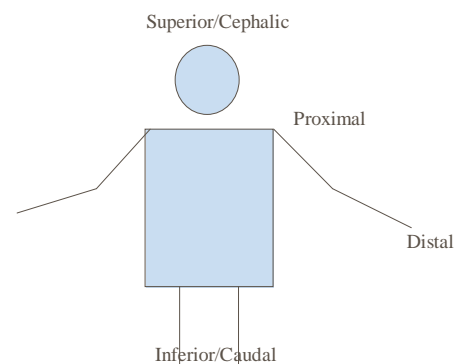
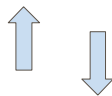
Directional Words

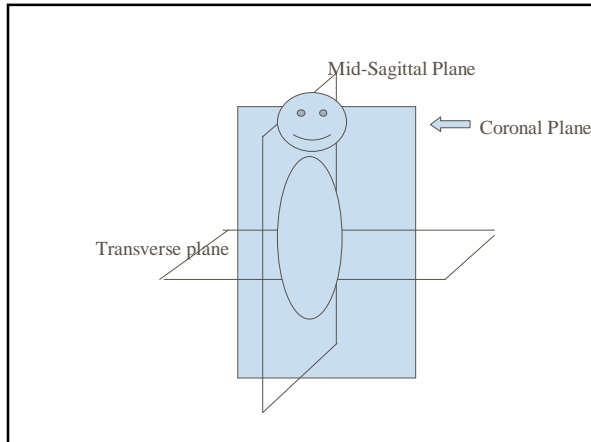
- | | | |
|--------------------|----------|--|
| ■ Dorsal | dors/o | ■ Near or on the back |
| ■ Ventral | ventr/o | ■ Near or on the belly side |
| ■ Anterior (ant) | anter/o | ■ Toward the front, in front of |
| ■ Posterior (post) | poster/o | ■ Following or located behind |
| ■ Cephalic | cephal/o | ■ Upward, toward the head |
| ■ Caudal, caudad | caud/o | ■ Downward, toward the tail |
| ■ Medial | medi/o | ■ Toward the midline |
| ■ Lateral | later/o | ■ Toward the side, away from the midline |



Directional Words

- | | | |
|------------|----------------|---|
| ■ Superior | super- | ■ Above |
| ■ Inferior | sub- or infra- | ■ Below |
| ■ Proximal | proxim/o | ■ Near the point of origin |
| ■ Distal | dist/o | ■ Away from the point of origin |
| ■ Sagittal | sagitt/o | ■ Vertical, anteroposterior direction or plane dividing into left and right |
| ■ Coronal | coron/o | ■ Resembling a crown or encircling |





Directional Terms - combined

- Front and side
- Front and middle
- Front and top
- Back and side
- Back and outside of the body
- Back and inside of the body
- Anter/o/later/al
- Anter/o/medi/al
- Anter/o/super/ior
- Poster/o/lateral
- Poster/o/extern/al
- Poster/o/intern/al

Directional Terms - combined

- From front to back, front and back
- From back to front
- Toward the back of the head
- Toward the front
- From left and back, diagonally
- Anter/o/poster/ior (AP) or ventr/o/dorsal
- Poster/o/anter/ior (PA)
- Dors/o/cephalad
- ventr/al, ventr/ad or Anter/ior
- Left posterior oblique (LPO)

More Practices...

- Elbow is _____ to the hand
- Ankle is _____ to the hip
- Middle and side
- Above and to the side
- Head to tail
- Proximal
- Distal
- Medi/o/later/al
- Super/o/later/al
- Cephal/o/caud/al
- (p.303 frame 9.6 in textbook is incorrect)

Sagitt/al

- Sagitt/al: A vertical cut made in anteroposterior direction
- Mid/sagitt/al: Sagittal cut made at the midline to divide the body into equal right and left halves
 - *Sagittalis* = arrowlike. (As if to say if struck with an arrow, a person would be cut into halves.)

Coron/al

- Crown or circle
- Coron/al suture line sits at the crown of the skull
- Corona dentis = crown of a tooth
- Coron/ary arteries encircle the heart to supply blood to heart muscle.
- Coron/ary veins encircle the heart to collect blood from heart muscle.

Omphal/o = Umbilicus, Navel

- Omphal/itis: Inflammation of the umbilicus
- Omphal/ic: Pertaining to the navel
- Omphal/ectomy: Excision of the umbilicus
- Omphal/o/cele or umbilico/o/cele: Herniation of the navel (umbilical hernia)
- Omphal/o/rrhagia: umbilical hemorrhage
- Omphal/o/rrhea: discharge flowing from the navel
- Omphal/o/rrhexis: rupture of the navel

Ad-, ad = Toward

- Cephal/ad: Toward the head
- Caud/ad: Toward the tail (lower spine)

- Cephal/o/caudal: head to body (tail) direction

Gnos = knowledge

- gnosis, gnosis = knowledge
- Pro/gnos/is: foreknowledge, predicting the outcome of a disease
- Pro/gnost/ic: giving an indication concerning the outcome of disease
- Dia/gnos/is: identification of a disease through signs and symptoms. "knowing through" or "know through"
 - Dia/gnos/tic (adj.)
 - Dia/gnos/e (verb)
 - Dia/gnos/es (plural)

Dia = through

- Dia/lysis: separation of substances in a solution. Process of destroying waste products in the blood by diffusion through a membrane
- Hem/o/dia/lysis: Removal of waste from the blood by using an artificial kidney machine
- Dia/scope: instrument placed on the skin to look through to see superficial surface lesions

Aer/o = Air

- Aer/o/phobia: abnormal fear of air
- Aer/o/therapy: treatment with air
- Aer/o/cele: herniation containing air

- Aer/o/bic (adj.): Plant or animal that needs air to live
- An/aer/o/bic (adj.): Plant or animal that cannot live in presence of air

Bi/o = Life, Living things



- Bios = Life
- Bi/o/chemistry: The study of chemical changes in living things
- Bi/o/logy: The science (study) of living things
- Bi/o/logist: The one who studies living things or life
- Bi/o/genesis: The formation of living things
- Bi/o/psy: Excision of tissue for examination of living tissue
- Bi/o/ethics: Study of what is good and bad for living things

Chrom/o = Color

- *Chroma* = color
- Chrom/o/cyte: Any colored cell
- Chrom/o/blast: An embryonic color (pigment) cell
- Chrom/o/lysis: Destruction of color (in a cell)
- Chrom/o/gen/esis: Formation of pigment (color)
- Chrom/o/meter: Instrument for measuring amount of color in a substance

Chrom/o = Color

- Chrom/o/philic: One that takes a stain easily (attracts stain)
 - Phil = attracted, loves
- Chrom/o/phobic or A/chrom/o/philic: One that stains poorly or not at all

Eu- = Well, Easy

- *Dys-* = Bad, difficult
- *Eu-* = Well, Easy

- | | | |
|-----------------|---|----------------|
| ■ Dys/pepsia | ↔ | ■ Eu/pepsia |
| ■ Dys/peptic | ↔ | ■ Eu/peptic |
| ■ Dys/pnea | ↔ | ■ Eu/pnea |
| ■ Dys/kinesi/a | ↔ | ■ Eu/kinesi/a |
| ■ Dys/esthes/ia | ↔ | ■ Eu/esthes/ia |
| ■ Dys/phor/ia | ↔ | ■ Eu/phor/ia |

-tocia = Labor

- Dys/tocia: Difficult labor and childbirth
- Eu/tocia: Easy or normal labor and childbirth

Than = death

- *Thanatos* = death
- Eu/than/asia: Easy or peaceful death

- Eu/gen/ic: Good development

- Dys/entery: Infection of the intestine that can cause pain and diarrhea

Men/o = Menses, Menstruation

- *Mensis* = month
- Men/ses: Men/struation
- Men/arche: first menstrual period
- Men/o/rrhea: flow of menses
- Dys/men/o/rrhea: painful menstrual flow
- Men/o/pause: permanent cessation of menstruation
- Men/o/rrhagia: excessive menstruation
- A/men/o/rrhea: absence (without) menstrual flow

-stasis = Act of Stopping, Controlling

- Hem/o/stasis: Act of controlling blood flow
- Men/o/stasis: Stopping menstrual flow
- Phleb/o/stasis or Ven/o/stasis: Control of blood flow in veins
- Arteri/o/stasis: Control of flow in arteries
- Lymph/o/stasis: Control of lymph flow

Syphil/o = Syphilis

- A sexually transmitted disease
- Syphil/o/psych/osis: mental condition caused by syphilis. (neurosyphilis)
- Syphil/o/phobia: fear of contracting syphilis
- Syphil/o/therapy: therapy for syphilis
- Syphil/oma: A syphilitic tumor
- Syphil/o/pathy: Any syphilitic disease

Pseudo- = False

- Pseud/o/cyesis, Pseud/o/pregnancy: A false pregnancy
 - -cyesis = from *kyesis* meaning pregnancy
- Pseud/o/sciences: a false science
- Pseud/o/mania: a psychosis in which patients have a false or pretended mental disorder
- Pseud/o/paralysis: False paralysis

Pseudo- = False

- Pseud/o/cyst: A false cyst
- Pseud/o/edema: False edema
- Pseud/o/esthesi/a: False or imaginary sensation
- Pseud/o/hyper/trophy: False hypertrophy
- Pseud/o/tubercul/osis: False tuberculosis
- Pseud/o/neur/oma: False nerve tumor

Viscer/o = Organs of the Body

- Viscera (singular: viscus) = internal organs of the body
- Viscer/ad: toward the viscera
- Viscer/o/genic: Pertaining to the development of organs
- Viscer/o/motor: a nerve conveying motor impulses to the viscera
- Viscer/o/pariet/al: Pertaining to the viscera and abdominal wall

Viscer/o = Organs of the Body

- Viscer/o/ptosis: Prolapse of organs
- Viscer/algia: Pain in organs
- Viscer/al: Pertaining to organs
- Viscer/o/sensor/y: Sensory function of organs
- Viscer/o/skelet/al: Pertaining to organs and the skeleton
- Viscer/o/gen/ic: Pertaining to the development of organs

Membranes

- Periton/eum:
 - The membrane that lines the abdominal cavity
- Pleura, Pleur/al membrane:
 - The membrane that covers the lung cavity

Pariet/o =Wall vs Viscer/o = Organs

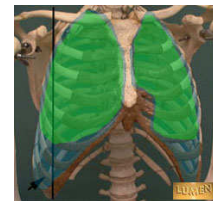
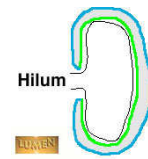
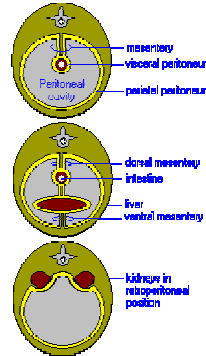
Periton/eum

- Visceral peritoneum
 - Surface of organs of abdominal cavity
- Parietal peritoneum
 - Membrane on the abdominal cavity wall

Pleura, Pleur/al membrane

- Visceral pleura
 - Surface of the lung
- Parietal pleura
 - Membrane on chest cavity wall

Cross sections through the abdomen



New Prefixes

- Ecto-, Exo- > Outer- outside
- Endo- > Inner-inside
- Meso- > Middle
- Retro- > Backward-behind
- Para- > Near

- **Blast/o/derm:** an embryonic disk of cells that gives rise to the 3 main layers of tissue

- **Inner germ layer** ✓ **Endo/derm**
 - Organs inside the body: stomach, intestine
- **Middle germ layer** ✓ **Meso/derm**
 - Muscle
- **Outer germ layer** ✓ **Ecto/derm**
 - Skin, nerve, glands, sense organs

Ecto-, Exo- = Outside

- Ecto/genous, Exo/genous: Something produced outside an organism
 - (People with type I diabetes need ectogenous insulin since he/she produce very little or no endogenous insulin)

Opposite of

- Endo/genous: Something produced within an organism

Symptoms of Diabetes

- Poly/ur/ia ❖ Excessive urination
- Poly/dips/ia ❖ Excessive thirst
- Poly/phag/ia ❖ Excessive hunger



Ecto-, Exo- = Outside

- Ecto/cyt/ic: Outside a cell
- Ecto/plasm: Protoplasm that forms outer membrane of the cell

Endo- = Inside

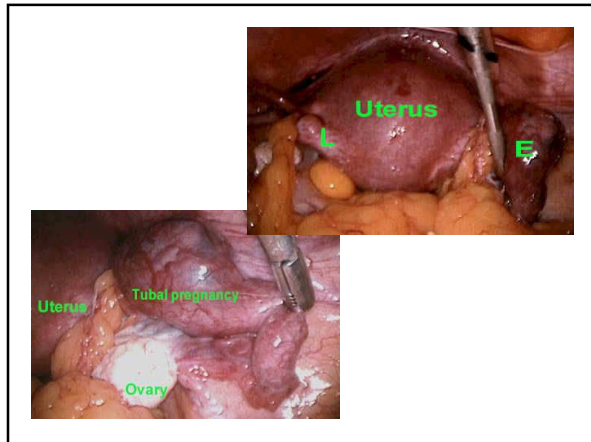
- Endo/cyst/ic: Inside a bladder
- Endo/plasm, Cyt/o/plasm: Protoplasm within a cell
- Endo/crani/al: Within the cranium
- Endo/chondr/al: Within cartilage
- Endo/enter/itis: Inflammation of the lining of the small intestine
- Endo/cardi/al, Endo/cardi/ac: Pertaining to the lining of the heart
- Endo/col/itis: Inflammation of the lining of a colon

Endo- = Inside

- Endo/scope: An instrument used to look into a hollow organ or cavity of the body
- Endo/scopy, Gastr/o/scopy: The process of viewing the stomach through an instrument
 - Esophag/o/gastr/o/duoden/o/scopy (EGD)
- End/arter/ectomy: Removal of a substance (atheroma) from the inside of an artery

Ectopic

- Ec/topic: Out of place
 - Ect/o = outside
 - Top/os = place
 - -ic = (adjectival suffix)
- Ectopic pregnancy is a pregnancy occurring outside of the uterus



Meso- = Middle

- Mes/enter/y: Peritoneum attaching intestine to the abdominal wall. (“middle intestine”)
- Meso/colon: Peritoneum attaching large intestine to the abdominal wall. (mesentery of the colon)
- Meso/dont/ic: Pertaining to middle-sized teeth

Retro- = Behind

- Retro/colic: Behind the colon
- Retro/mammary: Behind the mammary gland (breast)
- Retro/stern/al: Behind the stern/um
- Retro/version: Turning backward
- Retro/periton/eum: Space behind the peritoneum
- Retro/periton/itis: Inflammation of retroperitoneal space

Ante- vs. Retro-

- | | |
|-------------------------------------|---------------------------------------|
| ■ Ante- = Front,
Forward | ■ Retro- = Behind,
Backward |
| ■ Ante/flexion
■ Bending forward | ■ Retro/flexion
■ Bending backward |
| ■ Ante/version
■ Turning forward | ■ Retro/version
■ Turning backward |

ERCP

- Endo/scop/ic Retro/grade Chol/angi/o/pancreat/o/graphy (ERCP)
 - An X-ray procedure in which an endoscope is used to inject a contrast medium into the ducts of the pancreas and gallbladder so that any obstructions can be viewed.

Para- = Near, Beside, Around

- Para/centr/al: Near the center or around the center
- Para-/appendic/itis: Inflammation around the appendix
- Para/cyst/itis: Inflammation around (near) the bladder
- Para/colp/itis: Inflammation of tissues around (near) the vagina
- Para/hepat/itis: Inflammation of tissues around (near) the liver
- Para/nephr/itis: Inflammation of tissues around (near) the kidney

Abbreviation

- A ■ Before
- AD ■ Right ear (auris dextra)
- AP ■ Anteroposterior (anterior to posterior)
- AS ■ Left ear (auris sinistra)
- AU ■ Both ears (auris uterque)
- Bx ■ Biopsy
- CT ■ Computed tomography
- DRG ■ Diagnosis-related group
- Dx ■ Diagnosis, diagnoses
- ESRD ■ End-stage renal disease

Abbreviation

- Hx ■ History
- LAT ■ Lateral
- LMP ■ Last menstrual period
- LOA ■ Left occiput anterior
- LPO ■ Left posterior oblique
- OD ■ Right eye (ocula dextra)
- OS ■ Left eye (ocula sinistra)
- OT ■ Occupational therapy
- OU ■ Both eyes (ocula uterque), each eye

Abbreviation

- PA ■ Posteroanterior (posterior to anterior)
- p ■ After (post)
- Px ■ Prognosis
- ROP ■ Right occiput posterior
- RPO ■ Right posterior oblique
- RPR, VDRL ■ Syphilis test (blood test)
- STD, STI ■ Sexually transmitted disease (infection)
- TB ■ Tuberculosis
- VD ■ Venereal disease (old terminology)

The Layman's Medical Terms...

Euthanasia

Young people in Asia

Colic

A sheep dog

Coma

A punctuation mark

Minor Operation

Coal digging

Morbid

A higher offer

Congenital

Friendly

Cesarean Section

A district in Rome

Medical Staff

A doctor's cane