Medical Terminology

Unit 4
Pathology,
Otorhinolaryngology,
and Prefixes dys-, brady-, tachy-, poly-, syn-

Cocc/i
- Cocc/i (plural): spherically shaped family of bacteria. Coccus (singular)
- Coccus = Grain or seeds
- Bacteria types:
  - Pneum/o/cocc/us Pneum/o/cocc/i
  - Mening/o/cocc/us Mening/o/cocc/i
  - Dipl/o/cocc/us Dipl/o/cocc/i
  - Gon/o/cocc/us Gon/o/cocc/i
  - Strept/o/cocc/us Strept/o/cocc/i
  - Staphyl/o/cocc/us Staphyl/o/cocc/i

Strep & Staph
- Strept/o = twisted chains or strips
  - Streptococcus pyogenes (B-hemolytic Group A Streptococcus) \(\rightarrow\) strep throat
  - Streptococcus pneumoniae \(\rightarrow\) pneumococcus pneumonia
- Staphyl/o = grow in clusters like grapes
  - Staphyle = bunch of grapes
  - Staphylococci \(\rightarrow\) skin infection, food poisoning

Bacillus
- Bacillus (Bacilli = plural): Rod shaped bacterium (bacteria = plural)
- Dipl/o/bacill/us: rod-shaped double bacillus
- Strept/o/bacillus: rod-shaped bacillus growing in twisted chains

Uvula
- Tissue hanging at the back of the mouth
- Also uses “Staphyl/o” combining form since it hangs like a bunch of grapes
- Staphyl/o/plasty: surgical repair of the uvula
- Staphyl/o/itis (uvul/itis): inflammation of uvula
- Staphyl/o/ectomy (uvul/ectomy): excision of the uvula

Py/o = pus
- Py/o/cele: hernia containing pus
- Py/o/gen/ic: something that produce pus
  - -genic = producing or forming
    - Oncogenic: promoting tumor production
    - Pathogenic: producing disease
- Py/o/thorax: accumulation of pus in the thoracic cavity
- Purulent: pus forming or pyogenic
-rrhea = flow or discharge

- Py/o/rrhea: flow or discharge of pus
  - Pyorrhea alveolaris: a disease of the teeth & gums
  - Pyorrhea salivaris: flow of pus from a salivary gland
- Dia/rrhea: to flow through. (the passage of fluid or unformed stools)
- Ot/o/rrhea: discharge from the ear(s)
- Rhin/o/rrhea: discharge from the nose

Ot/o = Ear

- Ot = ear
- Ot/o/scope: instrument used to examine the ear
- Ot/o/scopy: process of examining the ear with an otoscope
- Ot/ic: pertaining to ear

Dia/rrhea: to flow through. (the passage of fluid or unformed stools)

Ot/o = Ear

- Ot/itis: inflammation of the ear
  - Otitis media: middle ear infection
  - Otitis externa: outer ear (ear canal) infection
- Ear pain
  - Ot/o/dynia
  - Ot/algia
- as (auris sinistra): left ear
- ad (auris dextra): right ear

Tympan/o = Eardrum

- Tympanum = eardrum
- Membrana tympani dextra (MTD): Right eardrum
- Membrana tympani sinistra (MTS): Left eardrum
- Tympan/ic: pertaining to the eardrum
- Tympan/o/tomy: incision into the eardrum
  - Also called Myring/o/tomy
- Tympan/o/ectomy: excision of the eardrum
- Tympan/o/metry: process of measuring the function of the eardrum
- Tympan/o/ites: distended with gas- as tight as a drum

Tympanic Membrane

Normal Otitis Media Perforated

Tympanic Membrane
**Audi/o = hearing**
- Audi/o/logy: study of hearing
- Audi/o/meter: an instrument used to measure hearing
- Audi/o/metry: the process of measuring hearing
- Audi/o/gram: record made by the instrument used to test hearing
- Audi/o/log/ist: a hearing specialist

**Rhin/o = Nose**
- Rhin/o/rrhea: discharge from the nose
- Rhin/itis: inflammation of the nose
- Rhin/o/plasty: surgical repair of the nose
- Rhin/o/tomy: incision of the nose
- Rhin/o/lith: calculus or stone in the nose

**Lith/o = Calculus, Stone**
- Lith/o/genesis: (noun) producing stones
- Lith/o/gen/ic: (adjective) producing stones
- Lith/o/tomy: incision for the removal of a stone
- Lith/o/meter: instrument for measuring size of calculi
- Lith/o/logy: science of dealing with or studying calculi or stones

**Chol/e = Gall bladder, bile**
- Chol/e/lith: gallstone
- Chol/e/lith/iasis: presence of gallstones in the gallbladder
  - -iasis = pathologic condition
  - Lith/iasis = presence of stones
    - Trichomonas → trichomoniasis
    - Yeast (monilia) → moniliasis
    - Filarial worm, causing lymph node inflammation → elephantiasis
    - Giardia lamblia → giardiasis

**Brady- = slow**
- Brady/kardia
- Brady/phag/ia
- Brady/peps/ia
  - Peps/o = digestion
**Tachy- = Fast, Rapid**

- Tachy/cardia
- Tachy/phag/ia
- Tachy/pnea
- Tach/o/gram — *Tachos* = swiftness
- Rapid heart action
- Fast eating
- Fast respiratory rate
- Record of the velocity of the blood flow

**Pne/o, -pnea = Breathing, Respiration**

- *Pneia* = breath
- Tachy/pnea: Rapid breathing
- Brady/pnea: Slow breathing
- A/pnea: Without breathing

**A-, An- = Without**

- A- precedes a consonant
- An- preceded a vowel
- A/gen/esis: without generation/origin (lack of development)
- A/peps/ia: cessation of digestion (without digestion)

**Genesis = Generation, Origin**

- A/gen/esis: failure to develop
- Carcin/o/gen/esis: development of cancer
- Carcin/o/gen/ic: pertaining to the development of cancer

**Dys- = Painful, Faulty**

- Prefix for painful, faulty, diseased, bad, difficult, or abnormal
- Dys/phag/ia: difficult swallowing
- Dys/trophy: poor development
- Dys/pnea: difficult breathing
- Dys/peps/ia: poor digestion
  - *Peps/o, pep/tic* = digestion
- Dys/men/o/rrhea: painful menstruation
- A/men/o/rrhea: absence of menstruation
  - *Men* = menstruation, *-rrhea* = flow

**Therm/o = Heat**

- *Thermos* = heat
- Therm/o/meter: an instrument to measure heat
- Therm/al or Therm/ic: pertaining to heat
- Therm/o/esthesia (or thermalgesia): oversensitivity to heat
- Therm/o/gen/esis: formation of heat
- Therm/o/phobia: abnormal fear of heat
- Therm/o/plegia: heatstroke (paralysis)
- Dia/therm/y: heating through tissue (treatment)
  - *Dia* = through
**Therm/o = Heat**

- Hyper/therm/ia: High body temperature
- Hypo/therm/ia: Low body temperature

**Normal Temperatures**

Oral: 98.6 degree Fahrenheit, 37 degree Celsius
Rectal: 99 degree Fahrenheit, 37.7 degree Celsius
Axillary: 97.6 degree Fahrenheit, 36.4 degree Celsius

Low Grade Fever: 99.5 – 101.4 degree Fahrenheit
True Fever: > or = to 101.5 degree Fahrenheit

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\text{\{ \} degree Fahrenheit} = (\text{\{ \} degree Celcius} \times \frac{9}{5}) + 32
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\text{\{ \} degree Celcius} = \frac{5}{9} \times (\text{\{ \} degree in Fahrenheit} – 32)
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**Micro = small**

- Micro/cyst: a very small cyst
- Micro/cephal/us: abnormally small head
- Micro/ocyte (adj = microcytic): a very small cell
- Micro/card/i/a: condition of having a small heart
- Micro/gram: 1/1000 of a milligram
- Micro/surgery: Surgery performed on minute structures using a microscope and small instruments

**Macro- = Large**

- Macro/cyte: a very large cell
- Macro/scop/ic: can be seen with the naked eyes
- Macro/cephal/us: an abnormally large head
- Macro/blast: a large embryonic cell
- Macro/cocc/us: a very large coccus

**Dactyl/o = fingers**

- Dactilos = finger
- Abnormally large fingers or toes:
  - Macro/dactyl/ia
  - Dactyl/o/megaly
- Dactyl/itis: inflammation of a digit
- Dactyl/o/spasm: cramp or spasm of a digit
- Dactyl/o/gram: a fingerprint
- Poly/dactyl/ism: too many fingers or toes

**Syn- = With, Together**

- Syn/dactyl/ism: joining together of 2 or more digits
- Syn/erg/ism: the action where 2 or more drugs or organs working together to produce an increased effect. Syn/erg/istic (adj.)
  - Syn = join, erg = work, -ism = condition, state
- Syn/erg/etic: describes muscles that work together
- Syn/arthritis: immovable joint
- Syn/drome: variety of symptoms occurring together. The complete picture of a disease.
Drom/o = Run
- Drom/o/mania: Insane impulse to wander or roam
- Syndrome: A variety of symptoms occurring (running along) together
  - Korsakoff’s syndrome
  - Fetal alcohol syndrome
  - Sudden infant death syndrome
  - Reye’s syndrome
- Prodrome: Running before (a disease). Symptoms that precede a disease.
  - i.e. “aura” of migraine, sneezes of a common cold

Dips = Thirst
- Dipsia = thirst
- Poly/dipsia: Excessive thirst
  - Can be caused by:
    - Eating too much salt
    - Diabetes, high blood sugar, spilling sugar in urine
    - Upset in pituitary gland secretion of hormones
    - Dehydration
    - Psychological, mental illness
- Dips/o/mania: an old term for alcoholism

Abbreviation
- AA ➢ Alcoholics Anonymous
- ACOA ➢ Adult Children of Alcoholics
- ad ➢ Right ear, *auris dextra*
- AFB ➢ Acid fast bacillus (i.e. TB)
- Ala-Teen ➢ AA support group for spouses of alcoholics
- as ➢ Left ear, *auris sinistra*
- C°C ➢ Celsius
- C&S ➢ Culture and Sensitivity
- CO2 ➢ Carbon dioxide
- DM ➢ Diabetes mellitus
- Fº ➢ Fahrenheit degrees
- FAS ➢ Fetal alcohol syndrome
- GB ➢ Gallbladder
- GNDI ➢ Gram negative intracellular diplococcus
- HBV ➢ Hepatitis B virus
- HIV ➢ Human immunodeficiency virus
- HPV ➢ Human papilloma virus
- LMP ➢ Last menstrual period
- mcg (µg) ➢ Microgram
- mg ➢ Milligram
- MTD ➢ Right ear drum (*membrana tympani dextra*)
- MTS ➢ Left eardrum (*membrana tympani sinistra*)

Abbreviation
- NVS ➢ Neurological vital signs
- OM ➢ Otitis Media
- O&P ➢ Ova and parasites
- P ➢ Pulse
- PAR ➢ Perennial allergic rhinitis
- R ➢ Respiration (rate)
- SIDS ➢ Sudden Infant Death Syndrome
- SOB ➢ Short of breath
- Staph ➢ Staphylococcus
- Strep ➢ Streptococcus
- T, temp ➢ Temperature
- TB ➢ Tuberculosis
- VS ➢ Vital signs
- ° ➢ Degree symbol

“*The ringing in your ears -- I think I can help.*”