



Lecture 3 Medical Terminology

Thursday 12/1 / 2017

Medical Terms

1 . Medical Terms sometime Look-alike or Sound-alike Terms and Word Parts Examples :
Arteri/o = artery ,Ather/0 = plaque or fatty substance ,Arthr/o = joint
Ileum = part of small intestine, Ilium = part of the hip bone **Mucous – adjective that describes specialized mucous membranes that line the body cavities. Mucus – a noun and the name of the substance secreted by the mucous membranes.**

Medical Terms

2 .The essentials for a successful medical terms include the following :

*** Pronunciation**

*** Spelling and Writing & Definition**

*** Proper uses of Root Words , Suffixes and Prefixes**

*** Singular and Plural uses for ending of medical terms follow a different set of rules from a given English standard ones**

Medical Terms

- 3 . The use of incorrect medical Terminology will lead to the following :**
 - Decreases & marginizes out role as professional in the healthcare environment**
 - May results in ineffective & harmful treatment**
 - May be detrimental in litigation**
 - May result in loss of trust in healthcare providers**

Medical Terms

4 . Learn the meanings of commonly used word elements and understanding how can be combined to make a medical terms .Think of each term as a combination of building blocks fitted together to create a precise meaning . When you see a new term break it down into the elements , then identify and define each element and this will helps you to define the term .

Suffix: Singular vs. Plural

Greek

Singular Suffixes

- o **-on**
 - o Spermatozoon, ganglion
- o **-ma**
 - o Carcinoma, lipoma
- o **-sis**
 - o Crisis, prognosis
- o **-nx**
 - o Larynx, pharynx

Plural Suffixes

- o **-a**
 - o Spermatozoa, ganglia
- o **-mata**
 - o Carcinomata, lipomata
- o **-ses**
 - o Crises, prognoses
- o **-ges**
 - o Larynges, pharynges

Suffix: Singular vs. Plural

Latin

Singular Suffixes

- **-a**
 - Vertebra, conjunctiva
- **-us**
 - Bacillus, bronchus
- **-um**
 - Bacterium, ilium
- **-is**
 - Testis

Plural Suffixes

- **-ae**
 - Vertebrae, conjunctivae
- **-i**
 - Bacilli, bronchi
- **-a**
 - Bacteria, ilia
- **-es**
 - Testes

Suffix: Singular vs. Plural

Latin

Singular Suffixes

- **-ex**
 - cortex
- **-ix**
 - Appendix
- **-ax**
 - thorax

Plural Suffixes

- **-ices**
 - cortices
- **-ices**
 - appendices
- **-aces**
 - thoraces

Practice...

Singular:

- Sarcoma
- Diagnosis
- Phalanx
- Coccus
- Calcaneum
- Vertex
- Cervix
- thorax

Plural:

- Sarcomata
- Diagnoses
- Phalanges
- Cocci
- Calcanea
- Vertices
- Cervices
- thoraces

Prefix

- Prefix is a word part that goes in front of a word root, changing the meaning of the word.

Prefix

- Ex- + tension = Extension
- Ex- + press = Express
- Dis- + please = Displease
- Dis- + ease = Disease
- Im- + plant = Implant
- Sup- + plant = Supplant
- Trans- + plant = Transplant

Acr/o = Extremities

- Acr/o = extremities (arms and legs)
 - Acr = word root
 - O = vowel
 - Acr/o = combining form
- Acr/o/paralysis: Paralysis of extremities
- Acr/o/cyan/osis: Condition of blue extremities
- Acr/o/dermat/itis: Inflammation of skin of the extremities, like red inflamed hands

Megal/o = Enlarged, Large

- **-megaly** = Suffix for “enlarged”
- **Acr/o/megaly**: Enlargement of the extremities
- **Acromegalic Gigantism** = A specific disorder of the body with enlargement of the bones of the hands, feet, and head.
- **-y** = Suffix that means “the process or condition”. Makes a word a noun.

Dermat/o = Skin

- **-logy** = (noun) Study of
- **-logist** = (noun) One who studies
- **-logos** = Greek for study
- **Dermat/o/logist**: The person who specializes in diseases of the skin
- **Dermat/o/logy**: The study of skin
- **Eti/o/logy**: Study of the origin of disease

-itis = Inflammation

- Dermat/itis: Inflammation of the skin
 - i.e. Contact (allergic reaction) dermatitis, or due to infection, inflammation, trauma
- Acr/o/dermat/itis: Inflammation of the skin of the extremities

-osis = Condition, Status, Process

- Dermat/osis: Any skin condition. (abnormal condition). (noun)
- Cyan/osis: Condition of blueness



Cyan/o = Blue, Blueness

- Cyan/osis: (noun) Condition of blueness
- Cyan/otic: (adj.) Pertaining to a condition of blueness
 - **-tic** = adjective suffix for “pertaining to”
- Acr/o/cyan/osis: Blueness of the extremities
- Cyan/o/derma: Bluish discoloration of the skin

The Layman's Medical Terms...

Not a friend

Artery

Study of painting

G.I. Series

Army baseball

Impotent

Distinguished, well known

Airport sickness

Varicose

Nearby

Seizure

Roman Emperor

Outpatient

Person who has fainted

Abbreviations & symbols

- Medical abbreviations and symbols are a “short hand” for medical professionals
- Most have been standardized and are universally accepted

Using Abbreviations

- Tid- three times a day Bid Twice daily
- Abbreviations can also lead to confusion and errors! Therefore, it is important that you be very careful when using or interpreting an abbreviation.
- Qd- everyday Q ID 4 X daily
- Po- by mouth
- Most clinical agencies have policies for accepted abbreviations
- If there is any question in your mind about which abbreviation to use, always follow this rule.
- When in doubt spell it out.

Abbreviations & symbols

- Individual facilities and specialties may use their own specific abbreviations and symbols or use a symbol differently

Example:  Means “change”

- In maternity care it is also used to mean “trimester”

The context indicates the meaning



- A patient S.J., 24 yo, ♀ 8 weeks gestation, c/o 1st bleeding 

Abbreviations & symbols

- Don't assume you know what an abbreviation or symbol means.
- Learn the abbreviations and symbols used on your clinical site during orientation to the practice, through chart review, and by asking.

Abbreviations & symbols

- Don't use your own personal abbreviations in health care documents.
- Use only standard medically accepted abbreviations and those used by the facility on your clinical site
- Use capital and small letters appropriately
- Non-standard abbreviations can result in medical errors and fines for the agency when discovered during chart audits

Common abbreviations & symbols

a.c.	before a meal
b.i.d.	twice a day
T.d.s	Three Times a day
<u>BM</u>	bowel movement
BP	blood pressure
q.d.s	Four Times a day
CDC	Centers for Disease Control

Medical abbreviations & symbols

ASD	Atrial Septal Defect
VSD	VentricularSeptal Defect
PDA	Patent Ductus Arteriosus
TOF	Tetralogy of Fallot
TGA	Transposition of Great vessel
P	pulse
p.c.	After meals
P.O.	By mouth
FBS , DM, COAP , SBE , GC , STD	

Medical abbreviations & symbols

p.r.n.	As needed
q.d.	Daily, once a day
q.h.	Every hour
q.i.d.	Four times a day
R	respiration
RR	respiration rate
CA	Cancer
stat.	immediately

Abbreviation

- Ac
- Ad lib
- am, A.M.
- Bid
- caps
- . gtts
- Before meals (ante cibum)
- Ad libetum as desired
- Ante meridiem (morning)
- Bis in die, twice a day
- capsules
- Drop, drops

Abbreviation

- I&O
- IABP
- ID
- IM
- inf
- instill
- IU
- IUD
- IV
- Intake and output
- Intra-aortic balloon pump
- Intradermal, identification
- Intramuscular
- Infusion
- Instillation
- International units
- Intrauterine device
- Intravenous

Abbreviation

- pc
- pm, P.M.
- PO, po
- prn
- sc, subcu, sq,
- tab
- tid
- †
- ♂
- After meals (post cibum)
- Post meridiem (after noon)
- Postoperative, by mouth (per os)
- Pro renata, as needed or required
- Subcutaneous
- tablet(s)
- Ter in die, three times a day²²
- Death
- Male

Abbreviation

- *H. pylori*
- IBS
- N & V
- PEG
- UGI

A & P resection
BE
OGD
ERCPC
GERD
GI

Abbreviation

- **FSH**
- **#**
- **HCG**
- **Laser**
- **mg**
- **Mm**
- **Follicle-stimulating hormone**
- **Fracture**
- **Human chorionic gonadotropin**
- **Light amplification by stimulated emission of radiation**
- **Milligram (0.001 gram)**
- **Millimeter (0.001 meter)**

Abbreviation

- T_3 , T_4 ,
TSH
- TIA
- TSH
- Triiodothyronine, tetraiodothyronine TSH
(thyroid function tests)
- Transient ischemic attack
- Thyroid-stimulating hormone

Medical symbols

- > greater than
- < less than
- ↓ decreased, down, lower
- ↑ increased, higher, up, elevate
- ↘ decreasing
- ↗ increasing
- # pound or number in orthopaedic means fracture bone

Medical symbols

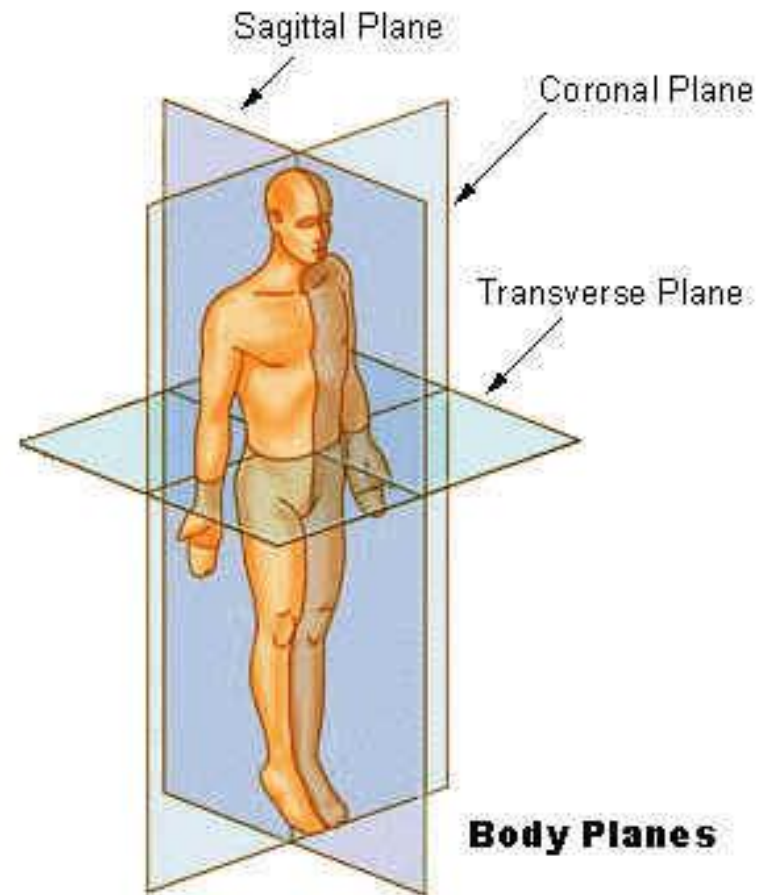
'	foot or minute
"	inch or second
o	degree
♂	male
♀	female
Δ	change, trimester
@	at

Anatomic Reference Systems

- ▶ Are used to describe the locations of structural units of the body.
- ▶ The simplest anatomic reference is the one we learn in childhood.
- ▶ Our right hand is on the right, and our left hand is on the left.
 - In medical terminology, there are several additional ways to describe the location of different body parts.
 - These anatomical reference systems include;
 - **Body planes, directions, cavities, and units.**

Anatomic reference system

- Here is an example of body planes, so you can get a better idea.



Body Direction Terms

- ▶ The relative location of sections of the body, or of an organ can be described through the use of pairs of contrasting body direction terms.
- ▶ **Ventral**-front or belly side.
- ▶ **Dorsal**- refers to back of organ or body.
- ▶ **Anterior**-situated in the front.
- ▶ **Posterior**-situated in the back.
- ▶ **Superior**-upper most, above, or toward the head.
- ▶ **Inferior**- lowermost, below, or toward the feet.
- ▶ **Cephalic**-toward the head.
- ▶ **Caudal**-toward the lower part of the body.

Body Direction Terms

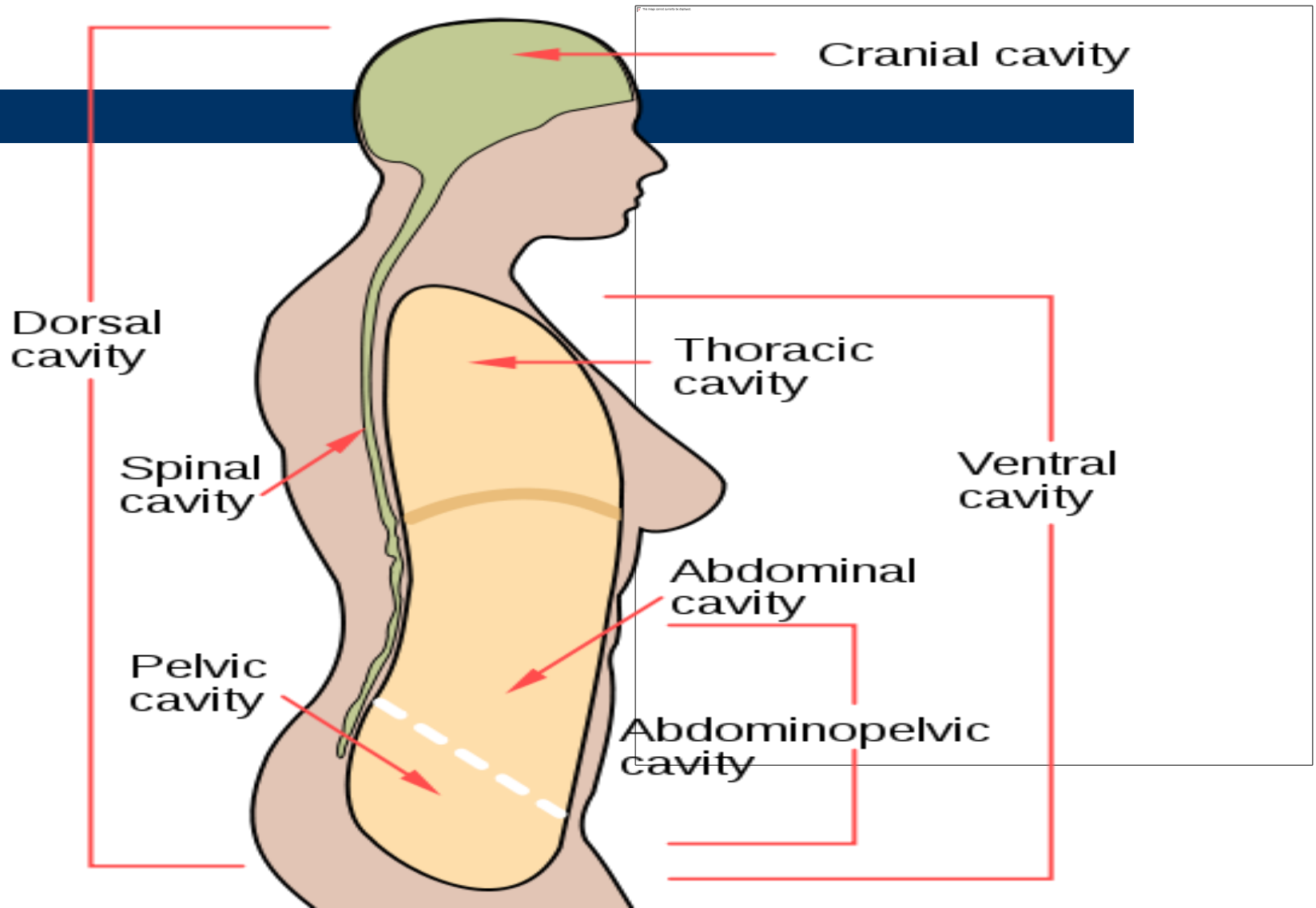
- **Proximal**- Situated nearest the midline or beginning.
- **Distal**- Situated farthest from the midline or beginning of the body structure.

- **Medial**- The direction toward or nearest the midline.
- **Lateral**- The direction toward or nearest the side and away from the midline.

Major Body Cavities

- The two major body cavities, which are the **dorsal** and **ventral** cavities, are spaces within the body that contain and protect internal organs.
- The dorsal cavity, which is located along the back of the body and head, contains organs of the nervous system that coordinate body functions and is divided into two portions.
- The **cranial cavity**, which is located within the skull, surrounds and protects the brain.
- Cranial means pertaining to the skull.
- The **spinal cavity**, which is located within the spinal column, surrounds and protects the spinal cord.

Major body cavities



Structures Of The Body

- The body is made up of increasing larger, and more complex, structural units.
- From the smallest to the largest these are: cells, tissue, organs, and the body systems.
- A body organ is a somewhat independent part of the body that performs a specific function.

Choosing a medical dictionary

- Explanations of medical procedures, conditions, disorders and diseases
- Clear, easy to understand definitions
- Pronunciation guidelines
- Abbreviations and symbols
- Useful diagrams, charts, reference tables containing information like lab values, conversion tables (metric to standard), etc
- Vocabulary useful to your chosen field

Learn medical terminology

- Study and learn a few words every day
- Make flash cards
- Practice using terms verbally
- Use symbols and abbreviations when you write notes
- Use a medical dictionary for reference
- Ask for a definition when you hear a term or see an abbreviation that you don't know

Pronunciation guidelines

- The “soft” pronunciation of the consonant is used when followed by e, i or y
- “c” sounds like “s”
cell, circulation, cyst
- “g” sounds like “j” when followed by e, i or y
genetic, gingivitis, gestation
- “ch” sounds like “k”
chronic, chromium, cholecystitis, psychologist

Pronunciation guidelines

- When a word ends in “i” it is pronounced like “eye” as in

bacilli

- “x” is pronounced “z” as in

xylocaine

xenophobic

Pronunciation guidelines

When “P” is at the beginning of words followed by a consonant:

- “ph” is pronounced “f” as in pharmacy
- “pn” is pronounced “n” (silent “p”) as in pneumonia, pneumococcus
- “ps” is pronounced “s” (silent “p”) as in psychotic,
psychosocial
psychologist