

Medical Terminology

Dr. Rafal J. Al-Saigh

Basic Elements of a Medical Word

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

These four parts of a word are known as
ELEMENTS.

4 Parts to a Medical Term

(1) Word Roots = base of a word

The main part of a word which contains the basic meaning usually refers to a body part (e.g. Cardi-Heart, Osteon-Bone).

(2) Combining Forms = is a Combining Vowel

(usually an “O”) that enable two parts to be connected.

Used to connect a word root ---to--- a suffix

Used to connect a word root --- to --- a word root

Don't use when suffix begins with a vowel (e.g. dermat/itis)

Use if suffix begins with a consonant (e.g. rhin/o/plasty)

(3) Prefixes = add at beginning of word root

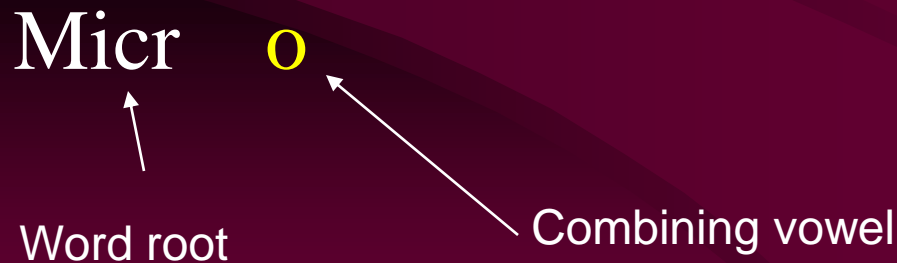
(4) Suffixes = add at end of word root (usually with combining vowel)

1. Word Root Examples

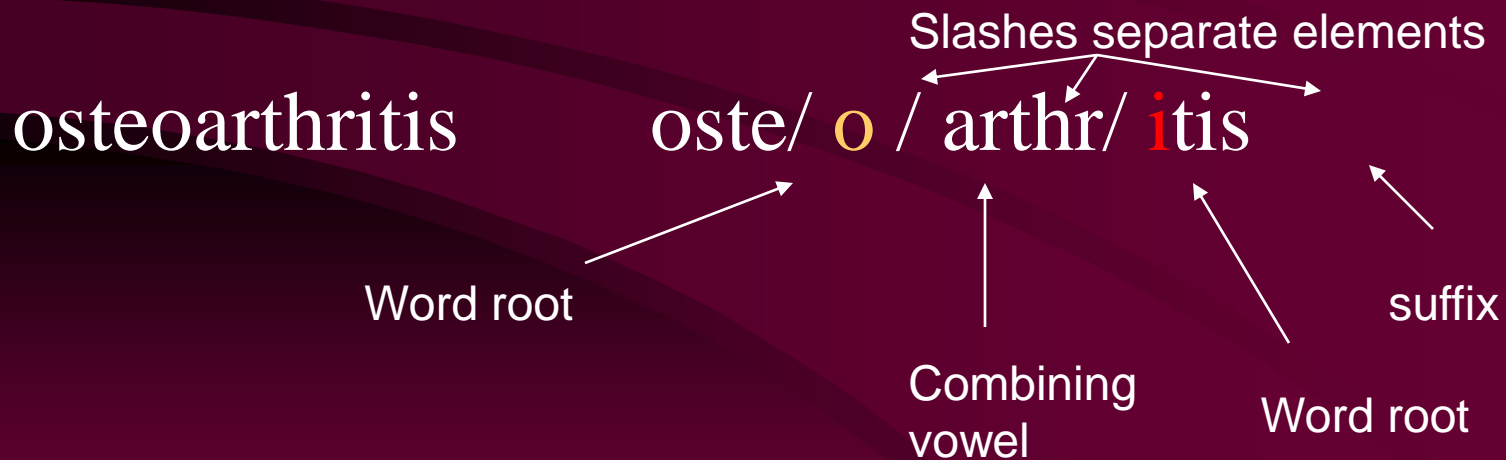
<u><i>Greek Word</i></u>	<u><i>Word Root</i></u>
Kardia (heart)	Cardi
Thorax (chest)	Thorac
Hepar (liver)	Hepat
Nephros (kidney)	Nephr
Osteon (bone)	oste

2. Combining Forms

- Combining forms consist of a combining vowel.
- The combining vowel is usually an “o”, but others may be used like (i, e, a, y).



- When a word has more than one root, a combining vowel is used to link the root to each other.



3. Prefixes

- Word parts placed at the beginning of word root to alter its meaning or create a new word.
- Usually indicates location (direction), number, or time
- Often not need a combining vowel with Prefix

Meta = after or beyond (direction)

Trans = through (direction)

Intra = within (direction)

Contra = against (direction)

- A- mast -ia
without breast condition
- hyper- therm -ia
excessive heat condition
- intra- muscul -ar
within muscle relating to

Pre-

(before)

Preoperative

Post-

(after)

Postoperative

Homo-

(same)

Homocystinuria







Hypo-

(below)
under

Hypotension

Prefix

Meaning

a		without
ab		away from
ana		up, toward
ante		before <small>antenatal</small>
anti		against
aut(o)		self

Prefix

Meaning

brachy



short

brachycephaly

brady



slow

contra



against

dys



abnormal; difficult

hemi



half

hyper



above normal

hypo



below normal

Prefix

Meaning

inter



between

Iso



equal; same

mal



bad; inadequate

meta



After

micr(o)



small

olig(o)



few; little; scanty

peri



around; about; near

Prefix

Meaning

pro



before; forward

re



again; backward

retro



behind; backward

semi



half

supra



above; over

tachy



fast

un



not

4. Suffixes

- ❖ A suffix is added to the END of a word root or to combining form to modify its meaning.
- ❖ By adding a suffix to the end of a word root, we create a noun or adjective with a different meaning.
- ❖ suffix often indicates the:
 - procedure
 - condition
 - disorder
 - disease

➤ Noun suffixes

➤ **-ism** --- condition (e.g. giant**ism**)

➤ **-osis** ---- abnormal condition (e.g. arterioscler**osis**)

➤ **-itis** ---- inflammation of (gastr**itis**)

➤ Adjective suffixes

➤ **-ous** --- pertaining to (e.g. erythemat**ous**)

➤ **-ic** ----- pertaining to (colposcop**ic**)

Meanings of certain suffixes

(derived from greek or latin language)

- Arthr/o -centesis Arthrocentesis
joint *puncture* *puncture of a joint*

- throac/o -tomy Thoracotomy
chest *incision* *incision of the chest*

- gastr/o -megaly Gastromegaly
stomach *enlargement* *enlargement of the*
stomach

Meanings of certain suffixes

(derived from modern language)

-al pertaining to dent/**al**
(pertaining to teeth)

-er one who speak/**er**
(one who speaks)

-able capable of being **playable**
(capable of being played)

If suffix begins with a **consonant**, therefore a **combining vowel** must be used between the word root and the suffix.

-scope	(instrument to view)	Gasteroscopy
-rrhexis	(rupture)	Angiorrhexis
-rrhea	(flow or discharge)	Rhinorrhea

If suffix begins with a **vowel**, therefore a combining vowel is **NOT** used between the word root and the suffix.

-algia	(pain)	Arthralgia
-edema	(swelling)	Papilledema
-uria	(urine, urination)	Heamaturia
-oma	(tumor)	Adenoma (glandular tumor)

Suffix

Meaning

-algia



pain

-asthenia



weakness

myasthenia

-blast



immature; forming

-cidal



destroying; killing

-clast



breaking

-crine



secreting

Suffix

Meaning

-crit



separate

-cyte



cell

-cytosis



condition of cells

-derma



skin

-ectasis



expanding; dilating

-ectomy



removal of

Suffix

Meaning

-emesis



vomiting

-emia



blood

-esthesia



sensation

-globin



protein

-gram



a recording

-graph



recording instrument

-graphy



process of recording

Suffix

-ic



pertaining to

-ism



condition; disease

-itis



inflammation

-kinesia



movement

-logist



one who practices

-lysis



destruction of

-malacia



softening

osteomalacia

Suffix

Suffixes (mania)

Meaning

-mania



obsession

-megaly



enlargement

-oid



like; resembling

-opia



vision

-ostomy



opening

-para



bearing

-pathy



disease

Suffix

Meaning

-penia



deficiency

-pepsia



digestion

-pexy



fixation

-phage



eating; devouring

-phobia



fear

-phonia



sound

-phrenia



of the mind

Suffix

Affixes (phylaxis)

Meaning

-phylaxis



protection

-plasty



surgical repair

-plegia



paralysis

-pnea



breath

-ptosis



falling down; drooping

-rrhagia



heavy discharge

-rrhaphy



surgical suturing

Suffix

Meaning

-rrhexis



rupture

-spasm



contraction

-stasis



stopping; constant

-stenosis



narrowing

-tomy



cutting operation

-trophy



nutrition

-tropia



turning

THANK YOU