University of Kerbala - College of Applied Medical Sciences
Department of Clinical Laboratories - 2 nd – 1st stage

Medical Terminology

Lecture No . 1

Specialized vocabulary used by health care providers.

Medical words composed of word elements, also known as *word parts,* and consisting of some or all of the following elements:

1- Word root (WR)

2- Combining form (CF)

3- Suffix

4- Prefix

❖ **Word Root (WR):**

Foundation of the word that contains its main meaning.

Usually from Latin or Greek language.

At least one word root in most medical words.

Some medical words, such as *heart* and *blood,* derived from early versions of French or English language without a word root.

Examples of words with roots:

hepat in hepat/itis

tonsill in tonsill/ectomy

gastr in gastr/oma

laryng in laryng/itis

❖ **Combining Form (CF):**

Created when a word root is combined with a vowel, known as a *combining vowel* .

Combining vowel usually an *o,* but sometimes an *i* or an *e.*

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Difficulty pronouncing certain combinations of word roots requires insertion of a vowel.

No meaning of its own, but a combining vowel enables two or more word elements to be connected .

Examples of words with CFs:-

mamm/o in mamm/o/gram

psych/o in psych/o/logy

laryng/o in laryng/o/spasm

hepat/o in hepat/o/megaly

❖ **Suffix:**

Word element at the end of a word.

Changes the meaning of a medical word.

Contained in most medical words.

Usually an indication of a pathology, condition, symptom, therapeutic or diagnostic procedure, or part of speech.

Examples of words with suffixes:-

-ectomy in append/ectomy

-itis in appendic/itis

-oma in neur/oma

-tomy in crani/o/tomy

-scope in gastr/o/scope

-oma in gastr/oma

❖ **Prefix :**

Word element at the beginning of a word.

Many the same as those used in the English language.

Changes the meaning of a medical word.

Not contained in all medical words.

Usually an indication of a number, time, position, measurement, direction, or negation.

Examples of words with prefixes:

hyper- in hyper/tension

hemi- in hemi/plegia

epi- in epi/derm/al

post- in post/nat/al

inter- in inter/cost/al

Three steps for defining medical words:

1-Define the suffix first.

2-Define the first part of the word (WR, CF, or prefix).

3-Define the middle part of the word (WR or CF).

gastr/itis:

oste/o/arthr/itis:

poly/neur/itis:

gastr/itis: inflammation of the stomach

oste/o/arthr/itis: inflammation of the bone and joint

poly/neur/itis: inflammation of many nerves

❖ **Three rules for building medical words:-**

Rule 1: A WR links a suffix that begins with a vowel.

Rule 2: A CF links a suffix that begins with a consonant.

Rule 3: A CF links a root to another root to form a compound word.

Rule 3 holds true even if the next root begins with a vowel, as in *gastr/o/intestin/al.*

Determine which of the three rules for building medical words applies to the following terms.

1-arthr/itis

2-gastr/o/intestin/al

3-hepat/o/cyte

arthr/itis — Rule 1: A root links a suffix that begins with a vowel.

gastr/o/intestin/al — Rule 3: A CF links a root to another root to form a compound word; a root links a suffix that begins with a vowel.

hepat/o/cyte — Rule 2: A CF links a suffix that begins with a consonant.

- ❖ **Diacritical marks and capitalization used to aid pronunciation of terms throughout the text and to help you understand pronunciation marks used in most dictionaries.**
- ❖ **Pronunciation guidelines are located on the inside front cover of the textbook and at the end of "Anatomy and Physiology Key Terms" tables.**

Suffix -Noun	**Suffix- Adjective**
osis- cyanosis ia- anemia us- mucus um- ilium e- condyle us- carpus it is- arthritis sis- emesis	otic- cyanotic ic- anemic ous- mucous ac- iliac ar- condylar al- carpal itic- arthritic tic- emetic

❖ **Singular & Plural :**

In English , usually add an (s or es) to make a word plural .Since many of the medical terms have Greek and Latin origins , the plural ending sometimes follow the rules of these language .

Singular Suffix	Plural Suffix
*-on **Spermatozoon, ganglion** ***-ma** **Carcinoma, lipoma** ***-sis** **Crisis, prognosis** ***-nx** **Larynx, pharynx** ***-a** **Vertebra, conjunctiva** ***-us** **Bacillus, bronchus** ***-um** **Bacterium, ilium** ***-is** **Testis** ***-ex** **cortex** ***-ix** **Appendix** ***-ax** **thorax**	***-a** **Spermatozoa, ganglia** ***-mata** **Carcinomata, lipomata** ***-ses** **Crises, prognoses** ***-ges** **Larynges, pharynges** ***-ae** **Vertebrae, conjunctivae** ***-i** **Bacilli, bronchi** ***-a** **Bacteria, ilia** ***-es** **Testes** ***-ices** **cortices** ***-ices** **appendices** ***-aces** **thoraces**