

## **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*.**

**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.**

- ❖ **Diaccritical 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<br>ia- anemia<br>us- mucus<br>um- ilium<br>e- condyle<br>us- carpus<br>it is- arthritis<br>sis- emesis | otic- cyanotic<br>ic- anemic<br>ous- mucous<br>ac- iliac<br>ar- condylar<br>al- carpal<br>itic- arthritic<br>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<br>Spermatozoon, ganglion | *-a<br>Spermatozoa, ganglia     |
| *-ma<br>Carcinoma, lipoma      | *-mata<br>Carcinomata, lipomata |
| *-sis<br>Crisis, prognosis     | *-ses<br>Crises, prognoses      |
| *-nx<br>Larynx, pharynx        | *-ges<br>Larynges, pharynges    |
| *-a<br>Vertebra, conjunctiva   | *-ae<br>Vertebrae, conjunctivae |
| *-us<br>Bacillus, bronchus     | *-i<br>Bacilli, bronchi         |
| *-um<br>Bacterium, ilium       | *-a<br>Bacteria, ilia           |
| *-is<br>Testis                 | *-es<br>Testes                  |
| *-ex<br>cortex                 | *-ices<br>cortices              |
| *-ix<br>Appendix               | *-ices<br>appendices            |
| *-ax<br>thorax                 | *-aces<br>thoraces              |