

Medical Terminology

First lecture

Define and elements of medical terminology

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- **Definition** : - Medical terminology is a system of words that are used to describe specific medical aspects and diseases. It is based on standard root words, prefixes, and suffixes.
- Terms dealing with the diagnosis and treatment of diseases and maintenance of health.
- Our body organs(Anatomic structures) are of Latin terms, whereas diseases that affect these organs are Greek origin.

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.

Word Root

- ❖ Main part or foundation of a word.
- ❖ All words have at least one word root.
- ❖ A word root may be used alone or combined with other elements to form a complete word.

Example: speak (word root) + er (suffix) =speaker (complete word)

The word root usually refers to a body part.

Some root words are derived from the Latin or Greek language.

Word Root Examples

- ❖ “dent” means tooth
- ❖ “dermat” means skin
- ❖ “cardi” means heart
- ❖ “gastr” means stomach
- ❖ “pancreat” means pancreas

Combining Forms

- ❖ Correct pronunciation of medical words is important.
- ❖ In order to make the pronunciation of word roots easier, sometimes it is necessary to insert a vowel after the root.
- ❖ The combination of a word root and a vowel is known as a **combining form**.

- ❖ Combining forms consist of a combining vowel.
- ❖ The combining vowel is usually an “o”, but others may be used.

Example: gastr / o pronounced gastro



word root



combining vowel

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

Example: osteoarthritis:

oste

o

arthr

itis



word root

combining vowel

word root

suffix

Word-Building System

By understanding the meanings of word roots, one can determine the meaning of complex medical terms by putting together the smaller parts.

Example: Leukocytopenia

Word Roots: Leuk / (white), cyt / (cell)

Combining Vowel / o /

Suffix: / penia (decrease)

Suffixes

- ❖ A suffix is added to the **end** of a word root or 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.

- ❖ A combining vowel is used between a word root and a suffix that begins with a consonant (not a vowel).
- ❖ This is to make pronunciation easier.

Example:

Word root: scler (hardening)

Suffix: derma (skin)

Term: scler / o / derma (hardening of the skin)



combining vowel

Meanings of certain suffixes

- 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)
- oma (tumor) hematoma (blood tumor)

NOTE: The element that comes before a suffix can either be a word root or combining form.

■ **The suffixes**

-scope (instrument to view)

-rrhexis (rupture)

-rrhea (flow or discharge)

all begin with a consonant, therefore a combining vowel must be used between the word root and the suffix.

▪ **The suffixes**

-algia (pain)

-edema (swelling)

-uria (urine, urination)

These suffixes begin with a vowel, therefore a combining vowel is **not** used between the word root and the suffix.

REVIEW

- ❖ A combining vowel is used to link one root to another root, and before a suffix that begins with a consonant.
- ❖ A combining vowel is not used before a suffix that begins with a vowel.

Prefixes

A prefix is a syllable or syllables placed before word or word root to alter its meaning or create a new word.

❖ Some prefixes:

Hyper- (excessive)

Pre- (before)

Post- (after)

Homo- (same)

Hypo- (under)

Example:

Hypoinsulinemia

Hypo

insulin

emia



Prefix



Word root



suffix

Low insulin blood

A 3D rendering of a red heart, a black stethoscope, and red ECG lines on a white background. The heart is positioned on the left side of the frame. The stethoscope is draped across the center and right. The ECG lines are scattered around the heart and stethoscope, with some lines appearing to be connected to the heart and stethoscope. The text "Thank you for Listening" is overlaid on the heart in a yellow, sans-serif font.

Thank
you
for
Listening