





2025 - 2024 المرحلة الثانية -

# Medical Terminology: suffixes denoting a state or condition

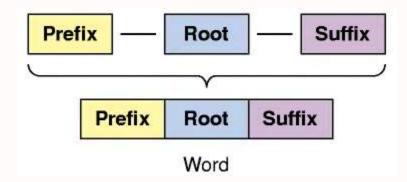
The Second Lecture

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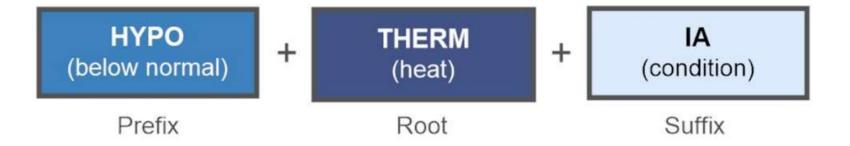
#### **Combining Vowels:**

- Combining vowels, often "o," are used to make medical terms easier to pronounce.
- Breaking down a term into its parts can aid in understanding its meaning.
- Suffixes are added to the end of words and play various roles.
- They can indicate fields of study, diagnostic techniques, anatomical structures, physiological processes, medical conditions, or social standings.
- Suffixes can also determine whether a word is an adjective, noun, or gerundive.
- Dissecting medical terms



### **Example of Term Deconstruction:**

- Illustrated with "hypothermia" as an example:
  - Prefix "hypo-" means "below normal."
  - Root "therm" means "heat."
  - Suffix "-ia" denotes "condition."



#### **Not All Suffixes Denote Condition**

Medical term requires knowledge of common medical roots, prefixes, and suffixes.

#### In medicine, terms are always suffixed

- 1. A root is the fundamental part of a word.
- 2. Roots can be found at the beginning of a word, after a prefix, before a suffix, or between a prefix and a suffix.
- 3. Suffixes are added to the end of a word to convey meaning, such as a condition, disease, or procedure.
- 4. For example, the suffix "-itis" signifies inflammation, and when added to "cardi," it forms "carditis," meaning inflammation of the heart.
- 5. Every medical term must include a suffix.
- 6. Understanding common suffixes that denote conditions or states is crucial in medical terminology.
- suffix **ist** refers to a person examples guitarist dentist florist typist nutritionist suffix **able** means an ability examples reversible responsible corruptable compactable connectable.
- suffix **less** means without examples hopeless careless restless fearless childless. suffix **us** means characterized by or full of examples ridiculous joyous marvelous glamorous courageous.
- suffix **sum** means tendency of examples quarrelsome handsome wholesome troublesome awesome.

The suffix "-osis": describe diseases or conditions affecting specific organs or systems.

Examples of medical terms using the suffix **-osis**:

- Arteriosclerosis: Hardening of the arteries.
- Osteoporosis: Decreased bone density condition.
- Osteoarthritis: Degeneration of the joints.
- Psoriasis: Skin condition with itchy, reddish-silver scales.
- Cirrhosis: Liver disease.
- Tuberculosis: Disease caused by Mycobacterium tuberculosis.
- Endometriosis: Condition where endometrial tissue grows outside the uterus.
- Sarcoidosis: Inflammatory disease affecting various organs.
- <u>-able means capable</u> of some of the examples of able are breakable inflammable comfortable respectable fashionable
- <u>-age</u> means action or process or result some of the examples of age are bondage marriage hostage shortage package
- **-ance** refers to a state or an action examples performance disturbance acceptance appearance resistance.

# The suffix -emia, denoting "presence of in the blood," is used in medical terminology for conditions related to abnormal substances in the blood. Examples include:

Anemia: Too few red blood cells in the blood.

Leukemia: Excessive white blood cells in the blood.

Hyperglycemia: Excess glucose in the blood.

**Hypoglycemia:** Insufficient glucose in the blood.

Hyperkalemia: Elevated potassium levels in the blood.

Hypokalemia: Reduced potassium levels in the blood.

Bacteremia: Presence of bacteria in the blood.

Viremia: Presence of viruses in the blood.

**Conditions Involving Normal Substances at Abnormal Levels:** 

Hyperlipidemia: High levels of lipids (fats) in the blood.

Hypercholesterolemia: Elevated cholesterol levels in the blood.

Hypertriglyceridemia: Increased triglyceride levels in the blood

# -pathy Suffix:

- Meaning: "Disease of" or "disorder of."
- Used to describe diseases or conditions affecting specific organs or systems.
- Examples: Neuropathy (nerves),
- Cardiomyopathy (heart muscle),
- Psychopathy (personality disorder),
- Hepatopathy (liver),
- Nephropathy (kidneys),
- Dermatopathy (skin),
- Arthropathy (joints),
- Osteopathy (bones).

# -algia Suffix:

- Meaning: "Pain."
- Used to describe conditions involving pain in specific body parts.
- Examples: Arthralgia (joints),
- . Myalgia (muscles),
- Cephalalgia (head),
- Neuralgia (nerves),
- Fibromyalgia (muscles and ligaments),
- Sciatica (radiating leg pain),
- Visceralgia (internal organs).

# -ectomy Suffix:

#### Meaning "Surgical removal of."

- Used to describe surgical procedures involving the removal of specific organs or tissues.
- Examples: Appendectomy (appendix),
- Hysterectomy (uterus),
- Cholecystectomy (gallbladder),
- Mastectomy (breast),
- Colectomy (portion of colon),
- Gastrectomy (portion of stomach),
- Nephrectomy (kidney), Thrombectomy (blood clot),
- Tonsillectomy (tonsils), Adenoidectomy (adenoids),
- Vasectomy (vas deferens),

## -rrhage Suffix: Meaning: "Excessive bleeding."

- Used to describe conditions involving rapid or uncontrolled blood loss.
- Examples: Hemorrhage (excessive bleeding), Hemoptysis (coughing up blood), Melena (black, tarry stools),
- Hematuria (blood in urine),
- Subarachnoid hemorrhage (brain and meninges),
- Intracerebral hemorrhage (brain tissue).

#### the suffix "-itis":

"-itis" denotes "inflammation of" in medical terminology.

It describes diseases or conditions characterized by inflammation in specific organs or tissues of the body.

Inflammation is a complex response involving the release of chemicals leading to redness, swelling, heat, and pain. "-itis" can also describe inflammation in broader areas of the body, such as:

- Peritonitis: Inflammation of the peritoneum (abdominal lining).
- Myocarditis: Inflammation of the

#### **Suffix -algia (Pain):**

Examples: Myalgia (muscle pain), Arthralgia

(joint pain).

#### Medical Terms Using Suffixes: -ia:

Hyperopia: Farsightedness

Myopia: Nearsightedness

#### -osis and -itis Suffixes: Both used to denote condition or state

• Both suffixes can be used together to describe a single disease or condition.

Example: Osteoarthritis is both a disease of the bones (-osis) and an inflammation of the joints (-itis).

Suffix -pathy (Disease or Disorder):

- Used in conditions involving structural or functional abnormalities of an organ or system.
- Examples: Cardiomyopathy (heart muscle disease), Neuropathy (nerve disorder).
- Generally associated with more serious or chronic conditions.

-ectomy:	-rrhage:
. Cholecystectomy	<ul> <li>Subarachnoid hemorrhage</li> </ul>
. Colectomy	<ul> <li>Intracerebral hemorrhage</li> </ul>
. Gastrectomy	· Cerebrospinal fluid leakage
. Mastectomy	· Peritoneal hemorrhage
. Nephrectomy	. Pleural hemorrhage
. Tonsillectomy	

#### **Examples of medical terms using the suffix -itis include:**

- Arthritis: Inflammation of the joints.
- Bronchitis: Inflammation of the bronchi (airway tubes to the lungs).
- Gastritis: Inflammation of the stomach.
- Meningitis: Inflammation of the meninges (surrounding brain and spinal cord).
- Otitis: Inflammation of the ear.
- Sinusitis: Inflammation of the sinuses.
- Dermatitis: Inflammation of the skin.
- Appendicitis: Inflammation of the appendix.

- **Suffixes** that signify medical conditions can modify root words to describe specific health conditions.
- For instance, "-porosis" (porous) is added to "oste/o" (bone) to create "osteoporosis," meaning "a porous condition of bone."
- **Suffixes** used for **diagnostic** terms, tests, and **surgical** procedures are often combined with root words representing body parts.
- For example, "appendectomy" combines "-ectomy" (removal of) with "append" (root for appendix), resulting in "removal of the appendix."

## -osis and -itis Suffixes: Both used to denote condition or state

-osis: "Disease of" or "condition of." Describes structural or functional abnormalities.

-osis often refers to chronic or long-term conditions.

-itis: "Inflammation of." Describes conditions involving inflammation.

-itis often refers to acute or shortterm conditions. Exceptions exist (e.g., dermatitis).

# MAMA