

Introduction to Medical Terminology

Medical terminology is language used to describe anatomical structures, procedures, conditions, processes, and treatments. At first glance, medical terms may appear intimidating (مخيف), but once you understand the basic word structure and the definitions of some common word elements, the meaning of thousands of medical terms can be easily parsed (مفهوم) .

Most medical terms adhere to a fixed structure of a prefix, root, and suffix. These word components are assembled like building blocks to create a vast vocabulary.

Greeks are considered the founders of rational medicine and medical terms are primarily derived from Greek and Latin. Over centuries, the language of medicine has evolved into multiple national medical languages. Today, medical English is the dominant language for international communication. English is used in most influential medical journals and it has become the language of choice at international conferences.

Basic Term Structure

Medical terms are comprised of these standard word parts:

- **Prefix**: When included, the prefix appears at the beginning of a medical term and usually indicates a location, direction, type, quality, or quantity.
- **Root**: The root gives a term its essential meaning. Nearly all medical terms contain at least one root. When a prefix is absent, the term begins with a root.
- **Suffix**: The suffix appears at the end of a term and may indicate a specialty, test, procedure, function, disorder, or status. Otherwise, it may simply define whether the word is a noun, verb, or adjective.
- **Combining vowel**: A combining vowel (usually the letter “o”) may be added between word parts to aid in pronunciation.
- Breaking a word down into its component parts should help readers determine the meaning of an unfamiliar term. For example, hypothermia has the prefix hypo- (meaning below normal), the root therm (heat or warmth), and the suffix -ia (condition).

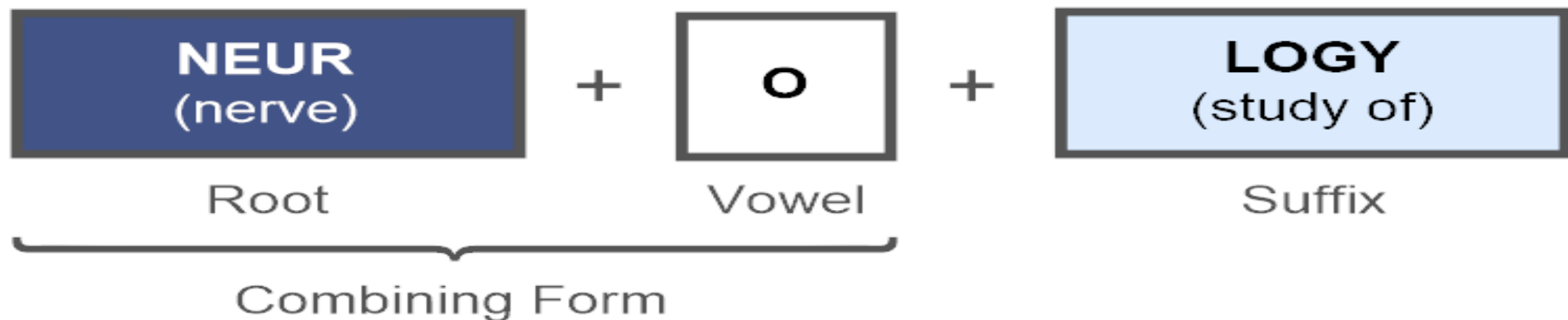
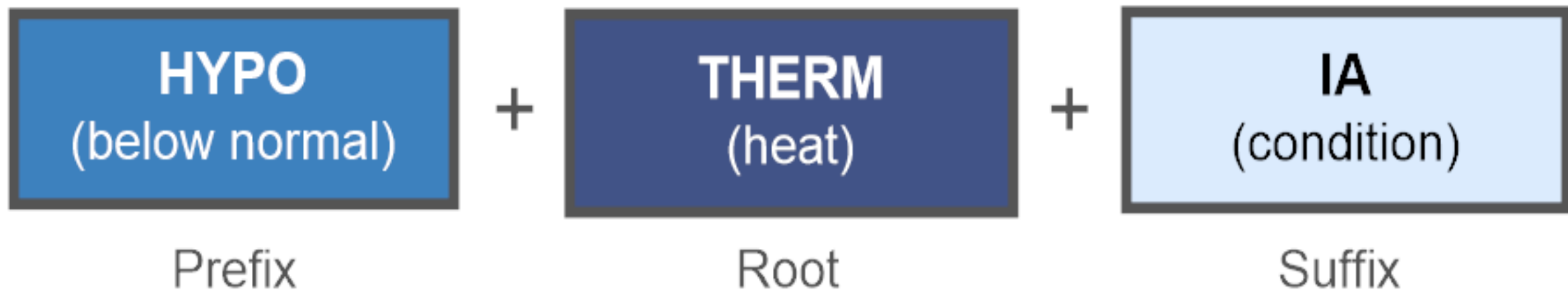
Compound Words

A medical word may include multiple roots. This frequently occurs when referencing more than one body part or system. For example, cardio-pulmonary means pertaining to the heart and lungs; gastro-entero-logy means the study of the stomach and intestines.

Another examples : musculo-skeletal system , Genito –urinary tract

Combining Forms

A combining vowel is used when a root is followed by another word part that begins with a consonant. A combining vowel (usually the letter 'o') is added after the root (e.g. neur-**o**-logy) to aid pronunciation. The root and vowel together (e.g. neur-o) are called the combining form. For simplicity, combining vowel options are omitted from the word part tables.



Word Roots

Head	
brain	Enceph..... Enceplelitis
ear	ot, aurOtitis , auricular اذني
eardrum	tympan, myringtympanic membrane
eye	ophthalm, ocul.....Ophthalmology , Ocular
face	Faci.....Facial pulsy
nose	Rhin.....Rhinitis ,Rhinoplasty
skull	Crani.....Cranial nerves
Tongue , Mouth	Lingu.....Lingual sensation , Or Oral
tooth	odont, dent..... Odontology , Dental hygiene

Heart and Circulatory

aorta	Aort.....Aortic aneurism
arteries	ArteriArterial Wall
blood	hem,Hemoglobin
blood vessels	Angi.....Angina pectoris , Angiography
heart	Cardi..... Cardiology
veins	ven, phleb..... Venous thrombosis , Phleboctomy

Bones and Muscles	
arm	Brachi.....Brachial plexus
back	Dorsa..... Dorsal side
bone	Oste..... Osteology
foot	pod, ped
muscle	Myo.....Myopathy
rib	Cost.....Costal margin , Intercostal
shoulder	ScapulScapular region
wrist	Carp.....Carpel tunnel

Digestive System	
appendix	Append.....Appendicitis
colon	Col.....Colectomy ,Colostomy
esophagus	EsophagEsophagitis
intestine (usually small)	Enter.....Enteropathy
kidney	ren, neph.....Renal stone , Nephrology
liver	Hepat.....Hepatoma
stomach	Gastr.....Gastritis

Other Common Roots	
cancer	Carci.....Carcinoma
Cancer of connective Tissue	Sarc Sarcoma
electric	Electr.....Electrical
heat	ThermThermal
knowledge	Gnos agnosti (ملحد) . diagnosis
life	Bi..... Biology
pressure	bar
returned sound	Echo , Ultrasonic , sonar