

Medical Terminology / Lecture (1)

CHAPTER 1

The Elements of a Medical Vocabulary

KEY TERMS

Adjective	a word used with a noun to modify its meaning
Analyze	to separate into elements or parts
Consonant	a letter of the alphabet other than a, e, I, o, u
Diphthong	a blend of two vowel sounds in one syllable
Interpret	to explain or tell the meaning of
Noun	a word that is the name of something, such as a person, place, thing, or idea
Plural	the form of a word denoting more than one
Pronounce	to say words or syllables aloud
Syllable	several letters taken together to form one sound
Vocabulary	a list or collection of words
Vowel	one of the letters a, e, I, o, u. the letter y sometimes serves as a vowel.

INTROBUCTION

This text has two main purposes:

1. To help you build a medical vocabulary easily and quickly, and
2. To assist you in interpreting medical terms as they are used in medical practice.

In this first chapter, we will talk about the way that medical terms are built. We will analyze the terms, and you will have practice exercises to help you remember. In later chapters you will learn how to interpret medical terminology as it is used by physicians and other health professionals.

COMMONLY USED TERMS

You may not realize that many medical terms are already a part of your vocabulary. You've seen them in print—in advertisements, for instance; you've heard them in television programs; and you've used them in conversation. Let's analyze a few medical terms that you are likely to have heard. Like the new medical terms you'll be learning later on, they are formed from combinations of parts.

Abnormal ab-is a word beginning, or prefix, often used in medical terms.

It Means away from.

Anemia an-is prefix meaning not or without. -emia is a word ending, or suffix, meaning blood condition.

Appendectomy -ectomy is a suffix used in surgical terms; it means taking out (excision) or removing; append-refers to the appendix.

Arthritis arthr is a word root meaning joint; -itis is a suffix meaning

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inflammation.

Diarrhea	dia- is a prefix meaning through; -rhea is a suffix meaning flow.
Hydrophobia	hydro-is a root meaning water; -phobia means fear it is the medical term for rabies, a disease in which the victim fears water because swallowing it leads to painful spasms.
Hypodermic	the prefix hypo- means beneath; the suffix -dermic means having to do with the skin. A hypodermic syringe (needle) injects fluid beneath the skin.
Neuralgia	neur- is the root for nerve; the word ending-algia means pain in the body part it follows.
Tracheotomy	trache is the medical root for trachea (the windpipe); -otomy is A surgical suffix that means a cutting or incision.

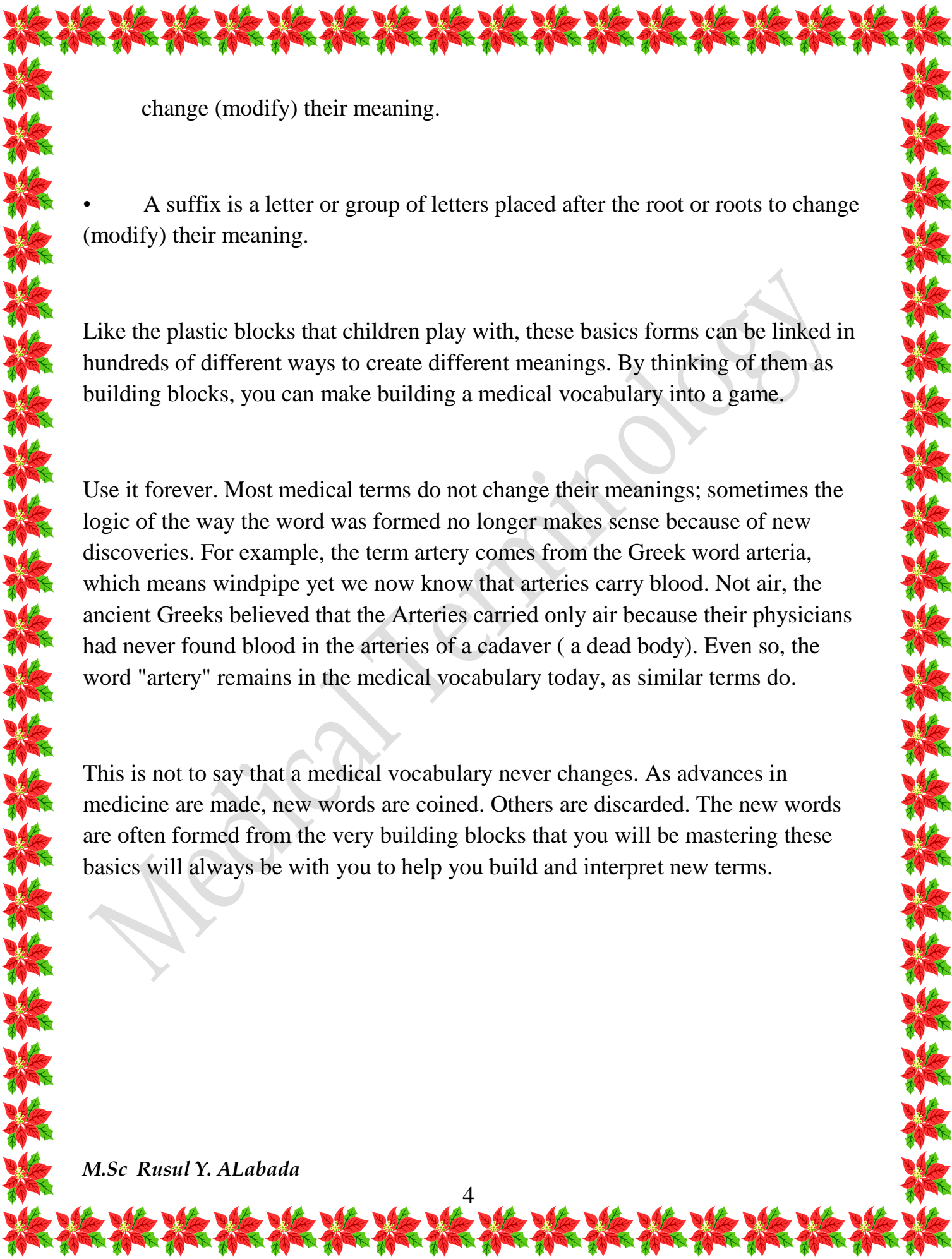
These are only a few examples of words that you may already have heard and used. You may feel quite comfortable with them. As you work through this text, you'll find the new terms becoming just as comfortable.

LEARNING AND REMEMBERING MEDICAL TERMS

Let's begin by learning some word parts. Medical terms have three basic elements:

- (1) Roots, (2) prefixes, and (3) suffixes (figure 1.1)
- The root is that part of a word that can stand alone and have meaning.
 - A prefix is a letter or group of letters placed before the root or roots to

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change (modify) their meaning.

- A suffix is a letter or group of letters placed after the root or roots to change (modify) their meaning.

Like the plastic blocks that children play with, these basics forms can be linked in hundreds of different ways to create different meanings. By thinking of them as building blocks, you can make building a medical vocabulary into a game.

Use it forever. Most medical terms do not change their meanings; sometimes the logic of the way the word was formed no longer makes sense because of new discoveries. For example, the term artery comes from the Greek word *arteria*, which means windpipe yet we now know that arteries carry blood. Not air, the ancient Greeks believed that the Arteries carried only air because their physicians had never found blood in the arteries of a cadaver (a dead body). Even so, the word "artery" remains in the medical vocabulary today, as similar terms do.

This is not to say that a medical vocabulary never changes. As advances in medicine are made, new words are coined. Others are discarded. The new words are often formed from the very building blocks that you will be mastering these basics will always be with you to help you build and interpret new terms.

BUILDING BLOCKS

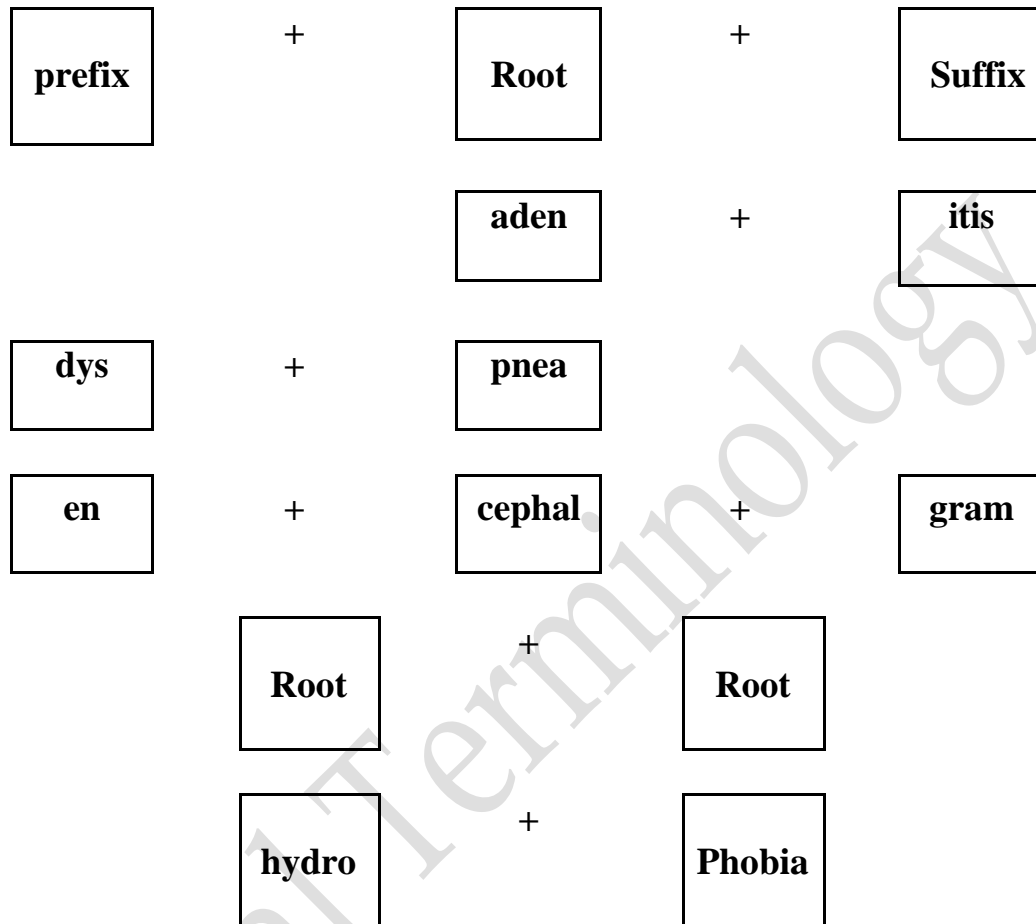


FIGURE 1.1 constructing medical terms using building blocks

Analyzing the structure of words

Now, let's explore some common building blocks (figure 1.1). in the lists of examples, you will see the building block, then its meaning, then its use in the full word, where the building block is shown in *italics*.

ROOT: The root of a word can stand alone and have meaning. For example:

root	Meaning	Example
aden	gland	Adenitis
cardi	heart	Cardiology
cephal	head	Encephalogram
derm	Skin	Dermatosis
flex	bending	Anteflexion
gastr	Stomach	Gastroscopy
hydr	Water	Hydrophobia
my	Muscle	Myalgia
neur	Nerve	Neuritis
pnea	Breath	Dyspnea

Prefix: Recall that a prefix is a letter or group of letters placed before a word to Change (modify) its meaning. For example:

Prefix	Meaning	Example
a-	without, not	Apnea
Ante-	before (in time or place)	Ante flexion
Dys-	bad, painful, difficult	dysfunction (Note: this is an example in which y serves as a vowel.)
endo-	Within	Endocrine
retro-	behind, backward	Retrograde

Suffix. Recall that a suffix is a letter or group of letters placed after a word to change (modify) its meaning. For example:

Suffix	Meaning	Example
-algia	Pain, painful condition	Neuralgia
-cele	Herniation or bulging	Hydrocele
-itis	Inflammation	Gastritis
-ology	Study or science of	Cardiology
-pathy	Disease	Myopathy