



CHAPTER 2

Common Prefixes and Suffixes

LEARNING OUTCOMES

Upon completion of this chapter, you should be able to:

- Recognize prefixes.
- Recognize suffixes.
- Define all the prefixes and suffixes presented in this chapter.
- Analyze and define new terms introduced in this chapter.
- Pronounce, define, and spell each term introduced in this chapter.
- Apply knowledge gained to Case Study Questions.

CASE STUDY

Bear's Bad Day

His football teammates called him Bear because he was both kind like a teddy bear and fierce on the field like a grizzly bear. On Monday morning, Bear just didn't have any energy. After Friday night's game, he came directly home instead of enjoying a victory party at the coach's house. Over the weekend, he stayed in bed much of the time, ate and drank very little, and only recalled using the bathroom twice to urinate. He stayed home from school on Monday, but he was worried about missing football practice. However, as he sat on his bed, he could hear his heart thumping hard against his chest. Bear's mom called the rescue squad, and he was immediately transported to the hospital.

Introduction

Chapter 1 presented the four different word parts used in medical terminology: prefixes, roots, suffixes, and combining forms. This chapter focuses on common prefixes and suffixes.

In Chapter 1, we learned that a prefix is a word part that comes at the beginning of a word. Note that the word prefix itself contains a prefix, pre-. The second

part of the word prefix is "fix," which gives us a perfect definition of prefix: something affixed (attached) to the front of or appearing before (pre-) something else. Most prefixes in medical terms are also found in everyday English. Although we have probably used many of the prefixes found in this chapter, we may have done so without realizing that they were prefixes. For example, when we are admitted to an anteroom, we may not stop to think that the prefix ante- means

“before,” and that it is called an anteroom because it is a room we enter before entering another room.

We also learned in Chapter 1 that a suffix is the part that comes at the end of a word. The word suffix comes from the Latin word *suffixum*, which may be translated as “to fasten to the end of.” Although the suffix is located last in a medical term, it often comes first in its definition. For example, *appendicitis* means “inflammation (-itis) of the appendix.” Therefore, the suffix, -itis, gives the first word of the defining phrase. The term *gastrectomy* is another example. It is defined as “removal of the stomach.” The definition begins with the meaning of the suffix, *-ectomy*, which means “removal of.”

Word Roots Introduced in This Chapter

Table 2.1 lists common word roots with their meanings to get you started on learning hundreds of medical terms. You may wish to memorize the roots

Table 2.1 Common Word Roots and Meanings

Word Root	Meaning
arter/i/o	artery
arthr/o	joint
card/i/o	heart
derm/at/o	skin
gen/i/o	origin, cause, formation
ger/o/onto	old age
hem/a/t/o	blood
hydr/o	water
iatr/o	physician
muscul/o	muscle
neur/o	nerve, nerve tissue
oste/o	bone
path/o	disease
ped/i/o	child
phren/o	diaphragm, mind
psych/o	mind
skelet/o	skeleton
spin/o	spine
tend/i/n/o	tendon

given in the table now, because there are just a few. Or if you prefer, just give them a quick glance now and, as you go through the chapter, refer to this table whenever you encounter a term with a root you do not recognize.

Categories of Prefixes

Not all medical terms include a prefix, but when one is present, it is important to the term’s meaning. For example, hyperglycemia (high blood sugar) and hypoglycemia (low blood sugar) are conditions that are exact opposites. Confusing those two prefixes creates errors. Two other similar-sounding prefix pairs prone to creating errors are ante- and anti-. The prefix *ante-* means “before,” and the prefix *anti-* means “against.”

Term	Part	Meaning
hypoglycemia	prefix: hypo- = low root: glyc/o- = sugar suffix: -emia = condition	low blood sugar
antecubital	prefix: ante- = before root: cubitum = elbow	anterior to the elbow
anticoagulant	prefix: anti- = against root: coagulant = substance that causes blood to clot	preventing coagulation; preventing clotting

Dividing prefixes into functional categories makes them easier to learn. There are five logical divisions:

- Prefixes of time and speed
- Prefixes of direction
- Prefixes of position
- Prefixes of size and number
- Prefixes of negation

Seeing prefixes in words we already know helps us learn their meanings quickly and enables us to understand medical terms we encounter later. For that reason, common English words are included as examples in some of the following paragraphs and tables.

Prefixes of Time and Speed

Prefixes denoting time and speed are used in everyday English. *Prehistoric* and *postgraduate* are common words with a prefix relating to time. Prefixes denoting speed, such as tachy- (fast) and brady- (slow), are often used to describe heart rate. **Table 2.2** lists prefixes related to time and speed.

Table 2.2 Prefixes of Time and Speed

Prefix	Refers to	Example	Meaning
ante-	before	antepartum	before birth, before full development
brady-	abnormally slow rate of speed	bradycardia	abnormally slow heartbeat
neo-	new	neonate	newborn
post-	after	postscript	a written thought added after the main message
pre-	before	premature	before birth, before full development
tachy-	rapid, abnormally high rate of speed	tachycardia	abnormally fast heartbeat

Prefixes of Direction

The word *abnormal* is an example of a word containing a prefix that signifies direction. We use such prefixes in everyday life without bothering to analyze them. For example, we normally would not take the time to think about the prefix *contra-* (against) in the word *contradiction*, yet we understand its meaning. Prefixes related to direction are listed in **Table 2.3**.

Prefixes of Position

Infrastructure (*infra-* means inside or below), *interstate* (*inter-* means between), and *paralegal* (*para-* means alongside) are all words we frequently use that include prefixes of position. Having these prefix meanings already in our working vocabularies makes it easier to learn their medical uses. Prefixes of position are commonly used during diagnostic procedures and treatments. **Table 2.4** lists prefixes relating to position.

Table 2.3 Prefixes of Direction

Prefix	Refers to	Example	Meaning
ab-	away from, outside of, beyond	abnormal	not normal
ad-	toward, near to	adjective	toward a noun
con-	with, within	congenital	with (or at) birth, with feeling toward, with the same idea or purpose
contra-	against	contraband	substance against the law
dia-	across, through	diameter	a line through the middle
sym-	with	sympathetic	with; acting or considered together
syn-	with, joined together	syndesmosis	immovable joint in which the bones are joined together

Table 2.4 Prefixes of Position

Prefix	Refers to	Example	Meaning
ec-	outside	extraction	removal to the outside
ecto-	outside	ectoderm	outermost layer of embryonic cells or tissue
en-	inside	encephalopathy	disease inside the head, brain disease
endo-	within	endoscopy	visual examination of the inside of some part of the body
epi-	upon, following, above, in addition	epigastric	adjective referring to something above the stomach

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Table 2.4 Prefixes of Position*(continued)*

Prefix	Refers to	Example	Meaning
ex-, exo-	outside	external	from outside
extra-	beyond	extracellular	adjective referring to something outside a cell
hyper-	above, beyond normal	hyperglycemia	high blood sugar
hypo-	low, below, below normal	hypogastric	region beneath the stomach
infra-	inside or below	infrarenal	adjective referring to something below the kidneys
inter-	between	interosseous	between bones
intra-	inside, within	intracerebral	inside the cerebrum
meso-	middle	mesothelioma	tumor arising from the mesothelium
meta-	beyond	metacarpal	the bone beyond the carpus; one of five bones in either hand
pan-	all or everywhere	pancarditis	general inflammation of the heart
para-	alongside, near, disordered function	paraplegia	paralysis of the lower half of the body
peri-	around	perivascular	in the tissues surrounding a vessel
retro-	backward, behind	retrosternal	adjective referring to something behind the sternum

Prefixes of Size and Number

A semiannual (semi- means “half,” annual means “yearly”) sale is one that occurs every 6 months. The

unicorn (uni- means “one”) is a fictitious creature that has one horn. Prefixes of size and number are very common. **Table 2.5** lists prefixes related to size and number.

Table 2.5 Prefixes of Size and Number

Prefix	Refers to	Example	Meaning
bi-	two	biannual	twice per year
di-, dipl-	two, twice	diplopia	double vision
hemi-	half	hemiplegia	paralysis of one body side
macro-	big	macrocyte	big cell
micro-	small	microscope	instrument to view small objects
mono-	one	monocyte	cell with one nucleus
olig-, oligo-	a few, a little	oliguria	small amount of urine production
pan-	all or everywhere	pancarditis	whole heart inflammation
poly-	many	polydactyly	more than five fingers or toes
quadri-	four	quadriplegia	paralysis of all four limbs
semi-	half, partial	semiannual	occurring every half year
tetra-	four	tetradactyl	having only four fingers or toes
tri-	three	triceps	three-headed muscle
uni-	one	unicellular	one-celled

Table 2.6 Prefixes of Negation

Prefix	Refers to	Example	Meaning
a-, an-	not	anuria	not able to urinate
anti-	against, opposed	antibiotic	drug that inhibits microbes
de-	without	dehumidifier	device that removes water
dis-	remove	disable	put out of action

Prefixes of Negation

Negation means without or the opposite of something. These include words like antidepressant (anti- means “against”) and decriminalize (de- means “without”).

Table 2.6 lists prefixes related to negation.

QUICK CHECK

Define each prefix and state whether it refers to time, speed, position, direction, number, or negation.

1. anti- _____
2. hyper- _____
3. tachy- _____

Categories of Suffixes

Dividing suffixes into functional categories makes them easier to learn compared to keeping them as a long list. A suffix adds to or changes a root in one of four different ways. Suffixes:

- signify a medical condition;
- signify diagnostic terms, tests, and surgical procedures;

- name a medical practice or practitioner; or
- convert a noun to an adjective.

For example, the suffix *-stenosis* indicates a narrowing or blockage in a body part, which is a condition. Consider the term *arteriostenosis*. Because the root *arter/i/o* means artery, we may conclude that *arteriostenosis* is a narrowing of an artery. Note how this term is divided into word parts:

Term	Part	Meaning
arteriostenosis	root: arter/i/o = artery	narrowing of an artery
	suffix: -stenosis = narrowing	

Suffixes Signifying Medical Conditions

The suffix *-porosis*, which means porous, is added to the root *oste/o*, to form the term *osteoporosis*, which means “a porous condition of bone.” See **Table 2.7** for more examples.

Table 2.7 Suffixes That Signify Medical Conditions

Suffix	Meaning of the Suffix	Example	Meaning of the Example
-algia	pain	arthralgia	joint pain
-cele	protrusion, hernia	rectocele	hernia of the rectum
-cyte	cell	leukocyte	white blood cell
-dynia	pain	arthrodynia	joint pain
-ectasis, -ectasia	expansion or dilation	angiectasis	dilation of a vessel
-edema (also a standalone word)	excessive fluid	angioedema	fluid buildup that causes swelling under the skin
-emesis	vomiting	hematemesis	vomiting of blood
-emia	blood	uremia	urea in the blood

(continues)

Table 2.7 Suffixes That Signify Medical Conditions*(continued)*

Suffix	Meaning of the Suffix	Example	Meaning of the Example
-iasis	condition or state	cholelithiasis	stones in the gallbladder
-ism	a condition of, a process, or a state of	hypothyroidism	condition characterized by thyroid hormone deficiency
-itis	inflammation	appendicitis	inflammation of the appendix
-lith	stone, calculus, calcification	rhinolith	a stone in the nose
-lysis	disintegration, breaking down	hemolysis	rupture of red blood cells
-malacia	softening	osteomalacia	softening of the bones
-megaly	enlargement	gastromegaly	enlargement of the stomach
-oid	resembling or like	opioid	substance that resembles opium
-oma	tumor	gastroma	tumor of the stomach
-osis	abnormal condition	osteoporosis	condition of porous bones
-pathy	disease	myopathy	disease of the muscle
-penia	reduction of size or quantity	leukopenia	low number of white blood cells
-phobia	fear	carcinophobia	fear of cancer
-plasia	abnormal formation	neoplasia	abnormal growth of cells
-plegia	paralysis	hemiplegia	paralysis on one side of the body
-pnea	breathing	tachypnea	rapid breathing
-poiesis	producing	erythropoiesis	production of red blood cells
-porosis	porous condition	osteoporosis	porous
-ptosis	downward displacement	nephroptosis	downward displacement of a kidney
-rrhage	flowing forth	hemorrhage	excessive bleeding
-rrhea	discharge	rhinorrhea	discharge from the nose (runny nose)
-rrhexis	rupture	hysterorrhexis	rupture of the uterus
-sclerosis	hardness	atherosclerosis	hardening of the arteries
-spasm	muscular contraction	angiospasm	muscular contraction of a vessel
-stasis	level, unchanging	thermostasis	a constant, consistent internal body temperature
-stenosis	a narrowing	arteriostenosis	narrowed arteries

Suffixes Signifying Diagnostic Terms, Tests, and Surgical Procedures

Suffixes that form terms related to diagnoses, tests, and surgical procedures are often attached to a root

that signifies a body part. The term *appendectomy* is an example. The suffix *-ectomy* means “removal of,” and *append* is the root for appendix. Thus, the term means “removal of the appendix.” **Table 2.8** lists common suffixes that signify diagnostic terms, tests, and surgical procedures.

Table 2.8 Suffixes That Signify Diagnostic Terms, Tests, and Surgical Procedures

Suffix	Refers to	Example
-centesis	surgical puncture	thoracentesis
-desis	surgical binding	arthrodesis
-ectomy	surgical removal	appendectomy
-gen, -genic, -genesis	origin, producing	osteogenic
-gram	a recording, usually by an instrument	electrocardiogram
-graph	instrument for making a recording	electrocardiograph
-graphy	act of graphic or pictorial recording	electrocardiography
-meter	instrument for measuring	audiometer
-metry	act of measuring	audiometry
-opsy	examination	autopsy
-pexy	surgical fixation	hysteropexy
-plasty	surgical repair	rhinoplasty
-rrhaphy	suture	herniorrhaphy
-scope	instrument for viewing	arthroscope
-scopy	act of viewing	arthroscopy
-stomy	artificial or surgical opening	tracheostomy
-tome	instrument for cutting	dermatome (used in skin grafts)
-tomy	incision	colotomy
-tripsy	crushing	lithotripsy

Suffixes That Signify Medical Practices and Practitioners

Some suffixes relating to medical practices and practitioners are derived from the Greek word *iatros*, which means “physician” or “medical treatment.” This Greek word is the source of the root *iatr/o*. For practical purposes, you may consider the root *iatr* as an integral part of the suffixes *-iatric* and *-iatr*, as in the terms *geriatrics*, *psychiatric*, *psychiatry*, *psychiatrist*, *pediatrics*, and *pediatrician*. Although both *-ician* and *-ist* are used in referring to a specialist, the suffix *-ist* is perhaps the more common one. An example is *gerontologist*, a physician who diagnoses and treats disorders of aging.

Terms denoting a field or medical specialty may also end with the suffix, *-logy*. **Table 2.9** lists the suffixes for medical practices and practitioners.

Root, prefix, or suffix? The word part *gen* can act as a suffix or a root, but like *iatro-*, it combines nicely with several suffixes and may be considered a part of them. Terms formed with *-genic* are adjectives because of the *-ic* ending. As described later, *-ic* can be a suffix by itself too.

Suffixes That Denote Adjectives

As with suffixes that signify medical practices and practitioners, suffixes used to create adjective forms do not have a clear set of rules. Nevertheless, there are some rules, such as the rules of English pronunciation. For example, we replace the final letter, *x*, in the word *appendix* with a *c* to form the adjective *appendicitis* because “appendixitis” does not sound much like an English word.

Table 2.9 Suffixes That Signify Medical Practices and Practitioners

Suffix	Refers To	Example
-ian	specialist	pediatrician
-iatrics	medical specialty	pediatrics
-iatry	medical specialty	psychiatry
-ics	medical specialty	orthopedics
-ist	specialist in a field of study	orthopedist
-logy	study of	gynecology

In creating adjectives, we also sometimes change noun terms that name specialties. For example,

psychiatry and *pediatrics* are the names of specialties. Removing the *y* from *psychiatry* and adding the adjective suffix *-ic* converts the specialty name to an adjective:

psychiatric medicine

psychiatric hospital

With *pediatrics*, the *s* is removed to form the adjective:

pediatric medicine

pediatric hospital

Examples of adjective suffixes are listed in **Table 2.10**.

Prefixes and suffixes presented in this chapter will become familiar as you progress through the next chapters on body systems. Review the following study tables and do the self-testing exercises.

Table 2.10 Suffixes That Denote Adjectives

Suffix	Refers to	Example
-ac, -al, -an, -aneous, -ar, -ary, -eal, -eous, -iac, -iatric, -ic, -ical, -oid, -otic, -ous, -tic, -ular	converts a root or noun to an adjective	geriatric, orthopedic, ocular

Study Table Common Prefixes

Prefix	Meaning	Example
a-, an-	not, without	anemic
ab-	away from, outside of, beyond	abnormal
ad-	toward, near to	adduction
ante-	before	antepartum
anti-	against, opposed	antibiotic
bi-	two	bipolar
brady-	abnormally slow rate of speed	bradycardia
con-	with	conjoined
contra-	against	contralateral
de-	not	deodorant
di-, diplo-	two, double	diploid
dia-	across, through	diagnosis
dis-	remove	disinfect
dys-	painful, bad, difficult	dyspnea
ec-, ecto-	outside	ectopy

Prefix	Meaning	Example
en-	inside	endosteum
endo-	within	endoderm
epi-	upon, above, in addition	epigastric
ex-, exo-	outside	exoskeleton
extra-	beyond	extrasystole
hemi-	half	hemiplegia
hyper-	above, beyond normal	hypergastric
hypo-	below, below normal	hypogastric
infra-	inside or below	infrastructure
inter-	between	intercostal
intra-	inside	intracerebral
macro-	big	macrophage
meso-	middle	mesoderm
meta-	beyond	metacarpal
micro-	small	microscope
mono-	one	monocyte
neo-	new	neoplasm
olig-, oligo-	a few, a little	oliguria
pan-	everywhere	pandemic
para-	alongside, near	paraplegia
peri-	around	perimeter
post-	after	postsynaptic
pre-	before	premature
quadri-	four	quadriceps
retro-	backward, behind	retroperitoneal
semi-	half, partial	semiconscious
sym-	with	sympathetic
syn-	with, joined together	synarthrosis
tachy-	rapid	tachycardia
tetra-	four	tetradactyl
tri-	three	triceps
uni-	one	unilateral

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Study Table Common Suffixes		
Suffix	Meaning	Example
-ac, -al, -an, -aneous, -ar, -ary, -eal, -eous, -iac, -iatic, -ic, -ical, -oid, -otic, -ous, -tic, -ular	converts a root or a noun term to an adjective	geriatric, orthopedic, ocular, dental, cutaneous, cyanotic, atrial, cardiac, ureteral
-algia	pain	myalgia
-cele	protrusion, hernia	rectocele
-centesis	surgical puncture	thoracentesis
-cyte	cell	leukocyte
-desis	surgical binding	arthrodesis
-dynia	pain	urodynia
-ectasis, -ectasia	expansion or dilation	angiectasis
-ectomy	surgical removal	appendectomy
-edema	excessive fluid in intracellular tissues	angioedema
-emesis	vomiting	hematemesis
-emia	blood	uremia
-genic	origin, producing	osteogenic
-gram	a recording, usually by an instrument	electrocardiogram
-graph	instrument for making a recording	electrocardiograph
-graphy	act of graphic or pictorial recording	electrocardiography
-ian, -iatrist, -ist, -logist, -logy, -ics, -iatry, -iatics	specialty of, study of, practice of	geriatrist, pediatrician, gynecology
-iasis	condition or state	cholelithiasis
-ism	a condition of, a process, or a state of	gigantism, hyperthyroidism
-itis	inflammation	appendicitis
-lith	stone, calculus, calcification	nephrolith
-lysis	disintegration	hemolysis
-malacia	softening	osteomalacia
-megaly	enlargement	gastromegaly
-meter	device for measuring	audiometer
-metry	act of measuring	audiometry
-oid	resembling or like	android, mucoid
-oma	tumor	gastroma
-opsy	visual examination	biopsy
-osis	abnormal condition	osteoporosis, arthrosis

Suffix	Meaning	Example
-pathy	disease	cardiopathy
-penia	reduction of size or quantity	leukopenia
-pexy	surgical fixation	hysteropexy
-phobia	fear	claustrophobia
-plasia	abnormal formation	chondroplasia
-plasty	surgical repair	rhinoplasty
-plegia	paralysis	hemiplegia
-pnea	breath, respiration	tachypnea
-poiesis	producing	erythropoiesis
-porosis	porous condition	osteoporosis
-ptosis	downward displacement	nephroptosis
-rrhage	flowing forth	hemorrhage
-rrhaphy	suture	herniorrhaphy
-rrhea	discharge	diarrhea
-rrhexis	rupture	hysterorrhexis
-sclerosis	hardness	arteriosclerosis
-scope	instrument for viewing	arthroscope
-scopy	act of viewing	arthroscopy
-spasm	muscular contraction	arteriospasm
-stasis	level, unchanging	hemostasis
-stenosis	a narrowing	arteriostenosis
-stomy	permanent opening	colostomy
-tome	instrument for cutting	osteotome
-tomy	incision	osteotomy
-tripsy	crushing	lithotripsy

CASE STUDY WRAP-UP

The medical personnel did a quick physical assessment and noted dehydration, hypotension, and oliguria. When the nurse tried to insert a needle into a vein to draw blood, she could not find a vein in his extremities that could accept the needle; she knew Bear was going into vascular collapse. She accessed his external jugular vein and began an intravenous infusion of Ringer's lactate solution. Bear fully recovered a few days later.

Case Study Application Questions

1. Define dehydration and note what the prefix *de-* and the root word *hydr* mean.
2. What does the prefix *hypo-* mean? What is hypotension?
3. Define *oliguria* and its word parts.
4. Using a reputable source, research the components of Ringer's lactate solution and name them.

END-OF-CHAPTER EXERCISES

Exercise 2.1 Adding Prefixes of Time and Speed

Form a new word by adding each prefix in the list to the word appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

Prefix	Word	New Word	Meaning
1. ante-	room	_____	_____
2. neo-	classic	_____	_____
3. post-	glacial	_____	_____
4. pre-	dominant	_____	_____
5. tachy-	meter	_____	_____

Exercise 2.2 Adding Prefixes of Direction

Form a new word by adding each prefix in the list to the word appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

Prefix	Word	New Word	Meaning
1. ab-	normal	_____	_____
2. ad-	joining	_____	_____
3. con-	centric	_____	_____
4. contra-	lateral	_____	_____
5. dia-	gram	_____	_____
6. sym-	pathetic	_____	_____
7. syn-	thesis	_____	_____

Exercise 2.3 Adding Prefixes of Position

Form a new word by adding each prefix in the list to the word or word part appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

Prefix	Word/Word Part	New Word	Meaning
1. ec-	centric	_____	_____
2. ecto-	morph	_____	_____
3. en-	slave	_____	_____
4. endo-	cardial	_____	_____
5. epi-	demic	_____	_____
6. ex-	change	_____	_____
7. exo-	sphere	_____	_____
8. extra-	terrestrial	_____	_____

Prefix	Word/Word Part	New Word	Meaning
9. hyper-	sensitive	_____	_____
10. hypo-	thesis	_____	_____
11. infra-	structure	_____	_____
12. inter-	collegiate	_____	_____
13. intra-	mural	_____	_____
14. meso-	sphere	_____	_____
15. meta-	physics	_____	_____
16. pan-	orama	_____	_____
17. para-	legal	_____	_____

Exercise 2.4 Adding Prefixes of Size and Number

Form a new word by adding each prefix in the list to the word or word part appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

Prefix	Word/Word Part	New Word	Meaning
1. bi-	annual	_____	_____
2. hemi-	sphere	_____	_____
3. macro-	cosm	_____	_____
4. micro-	scope	_____	_____
5. mono-	rail	_____	_____
6. olig-	archy	_____	_____
7. quadri-	lateral	_____	_____
8. semi-	annual	_____	_____
9. tri-	angle	_____	_____
10. uni-	cycle	_____	_____

Exercise 2.5 Combining Roots and Suffixes That Denote Medical Conditions

Build new words by combining the correct form of each root with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

Root	Suffix	New Word	Meaning
1. card/i/o	-cele	_____	_____
	-dynia	_____	_____
	-ectasia	_____	_____
	-itis	_____	_____
	-malacia	_____	_____

1. card/i/o	-megaly	_____	_____
	-ptosis	_____	_____
	-plegia	_____	_____
	-rrhexis	_____	_____
	-spasm	_____	_____
2. dermat/o	-itis	_____	_____
	-oma	_____	_____
	-megaly	_____	_____
3. hem/o, hemat/o	-osis	_____	_____
	-lysis	_____	_____
	-genesis	_____	_____
4. neur/o	-oma	_____	_____
	-algia	_____	_____
	-ectasis	_____	_____
	-itis	_____	_____
5. oste/o	-oma	_____	_____
	-dynia	_____	_____
	-malacia	_____	_____
	-penia	_____	_____
	-porosis	_____	_____
	-itis	_____	_____
6. psych/o	-osis	_____	_____

Exercise 2.6 Combining Roots and Suffixes That Denote Diagnostic Terms, Tests, and Surgical Procedures

Build new words by combining the correct form of each root with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

Root	Suffix	New Word	Meaning
1. card/i/o	-genic	_____	_____
	-gram	_____	_____
	-graph	_____	_____
	-graphy	_____	_____
	-pathy	_____	_____
	-rrhaphy	_____	_____
2. dermat/o	-plasty	_____	_____

3. hemat/o	-genesis	_____	_____
	-metry	_____	_____
4. neur/o	-ectomy	_____	_____
	-genic	_____	_____
	-genesis	_____	_____
5. oste/o	-rrhaphy	_____	_____
	-plasty	_____	_____
	-genesis	_____	_____
	-ectomy	_____	_____
6. path/o	-tomy	_____	_____
	-gen	_____	_____
	-genic	_____	_____
	-genesis	_____	_____
7. psych/o	-gen	_____	_____
	-genic	_____	_____
	-genesis	_____	_____
	-metry	_____	_____
	-pathy	_____	_____

Exercise 2.7 Combining Roots and Suffixes Associated with Medical Practices and Practitioners

Build new words by combining the correct form of each root with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

Root	Suffix	New Word	Meaning
1. card/i/o	-logy	_____	_____
	-logist	_____	_____
2. derm/o, dermat/o	-logy	_____	_____
	-logist	_____	_____
3. ger/o/nt/o	-iatrics	_____	_____
	-logy	_____	_____
	-logist	_____	_____
4. hem/o, hemat/o	-logy	_____	_____
	-logist	_____	_____
5. neur/o	-logy	_____	_____
	-logist	_____	_____
6. oste/o	-logy	_____	_____
	-logist	_____	_____

7. path/o	-logy	_____	_____
	-logist	_____	_____
8. psych/o	-logy	_____	_____
	-iatry	_____	_____
	-iatrist	_____	_____

Exercise 2.8 Combining Roots and Suffixes That Denote Adjectives

Build new words by combining the correct form of each root with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

Root	Suffix	New Word	Meaning
1. card/i/o	-ac	_____	_____
2. hem/o, hemat/o	-toxic	_____	_____
3. derm/o, dermat/o	-al	_____	_____
	-ic	_____	_____
4. ger/o, geront/o	-iatric	_____	_____
	-al	_____	_____
5. neur/o	-al	_____	_____
	-ic	_____	_____
6. spin/o	-al	_____	_____
	-ous	_____	_____
7. oste/o	-al	_____	_____
	-oid	_____	_____

Exercise 2.9 Matching Suffixes with Meanings

Match the suffix in Column 1 with its definition in Column 2.

Column 1

1. _____ -cyte
2. _____ -edema
3. _____ -emesis
4. _____ -sclerosis
5. _____ -tome
6. _____ -ism
7. _____ -lith
8. _____ -lysis

Column 2

- a. fear of or aversion to something
- b. vomiting
- c. a stone, calculus, calcification
- d. a condition, a process or state of
- e. disease
- f. visual examination
- g. cell
- h. disintegration

- | | |
|---------------------|---|
| 9. _____ -opsy | i. excessive fluid in intracellular tissues |
| 10. _____ -pathy | j. instrument for cutting |
| 11. _____ -phobia | k. level, unchanging |
| 12. _____ -poiesis | l. a narrowing |
| 13. _____ -stomy | m. hardness |
| 14. _____ -stasis | n. permanent opening |
| 15. _____ -stenosis | o. producing |

Exercise 2.10 Fill in the Blank

Fill in the blank with the correct answer.

1. What two suffixes mean “pain”? _____
2. *Ang/i/o* is a root meaning “blood vessel.” What term means “dilation of a blood vessel”? _____
3. Angioid means “resembling blood vessels.” What part of speech is angioid? _____
4. Define angiorrhaphy. _____
5. What suffix would you add to the root *ang/i/o* to form a term meaning “the act of making a pictorial record of blood vessels”? _____
6. What is an angioma? _____
7. What does *-plasty* mean? _____
8. What term denotes a skin specialist? _____
9. Does a gerontologist treat young or old patients? _____
10. What is the difference in meaning between *gerontology* and *geriatrics*? _____
11. The prefixes *ab-* and *ad-* are opposites; which one means “toward”? _____
12. The prefix *pre-* means “before”; what other prefix means “before”? _____
13. Write a brief definition of bradycardia _____
14. What does the prefix *extra-* mean in the word *extrasensory*? _____
15. What prefix would you use in a term that means “high blood pressure”? _____
16. Given the meaning of *anti-*, what would be the purpose of an anticoagulant? _____
17. Given the meaning of the prefix *tri-*, how many cusps does the tricuspid valve have? _____
18. What does the prefix *micro-* tell us about the purpose of a microscope? _____
19. Write a medical term by combining the prefix *endo-* with the root *card/i/o*, meaning “heart,” and the suffix that means “inflammation.” Using only your knowledge of these three word parts, write the best definition you can for the term _____.
20. The suffix *-pnea*, meaning “breathing” or “respiration,” can follow both *tachy-* and *dys-*. Define the terms tachypnea and dyspnea: _____

Exercise 2.11 Reflection

1. After reading Chapter 2, how are you feeling about learning medical terminology?
2. Success in any course requires study, practice, and time. What study strategies do you have in place? How will you manage your time?

