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**SEER Program**

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**Self Instructional Manual for Cancer Registrars**  
**Tumor Registrar Vocabulary: The Composition of Medical Terms**

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**Book Three**

Second Edition

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**SEER PROGRAM**

**SELF-INSTRUCTIONAL MANUAL FOR CANCER REGISTRARS**

**Book 3 - CANCER REGISTRAR VOCABULARY: THE COMPOSITION OF MEDICAL TERMS**

**Second Edition**

**Originally Prepared for the Louisiana Regional Medical Program**

**Under the Direction of:**

**C. Dennis Fink, Ph.D., Program Director, HumRRO  
Robert F. Ryan, M.D., Technical Advisor, Tulane University**

**Revised by:**

**SEER Program  
Cancer Statistics Branch, National Cancer Institute**

**Editor-in-Chief:**

**Evelyn M. Shambaugh, M.A., CTR  
Cancer Statistics Branch, National Cancer Institute**

**Assisted by Self-Instructional Manual Committee:**

**Dr. Robert F. Ryan, Emeritus Professor of Surgery  
Tulane University School of Medicine  
New Orleans, Louisiana**

**Mildred Weiss  
Los Angeles, California**

**Ruth Navotny  
San Francisco, California**

**Mary A. Kruse  
Bethesda, Maryland**

**BOOK 3**

**CANCER REGISTRAR VOCABULARY:  
THE COMPOSITION OF MEDICAL TERMS**

## TABLE OF CONTENTS

### BOOK 3: CANCER REGISTRAR VOCABULARY: THE COMPOSITION OF MEDICAL TERMS

	Page
Section A--Objectives and Content of Book 3 .....	1
Section B--Word Roots, Suffixes, and Prefixes .....	5
Section C--Common Symptomatic Suffixes .....	31
Section D--Common Diagnostic Suffixes .....	63
Section E--Cancer Registrar Vocabulary: Complaints and Symptoms .....	93
Section F--Cancer Registrar Vocabulary: Physical Findings .....	125
Section G--Cancer Registrar Vocabulary: Illnesses .....	155
Section H--Abbreviations, Symbols, and Acronyms Used in Medical Records .....	185
Abbreviation Index .....	189
Definition Index .....	195
Common Symbols .....	201
Acronyms for Organizations Concerned With Cancer .....	203
Acronyms for Study Groups .....	207
Selected Bibliography .....	209
Index .....	213

**SECTION A**  
**OBJECTIVES AND CONTENT OF BOOK 3**



## **SECTION A**

### **OBJECTIVES AND CONTENT OF BOOK 3**

As a cancer registrar, you eventually will learn the meaning of hundreds, even thousands, of medical terms. For most of these words you will not need to know their exact definition. You will, however, need to be able to recognize diagnostic terms versus treatment terms, terms that refer to anatomical sites, terms that describe types of benign and malignant neoplasms, and terms that refer to patient symptoms.

Sections B, C, and D of this book are concerned with word roots, prefixes and suffixes.

Sections E, F, and G of this book are concerned with terms used in describing symptoms, physical findings, and illnesses of cancer patients.

Section H is an alphabetical listing of common acronyms, abbreviations, and symbols used in medical records.



**SECTION B**  
**WORD ROOTS, SUFFIXES, AND PREFIXES**



## SECTION B

### WORD ROOTS, SUFFIXES, AND PREFIXES

You probably already know that most English words are derived from some other language, such as Greek, Latin, French, or German. This is especially true of medical terms which usually are based on Greek or Latin words. For example, the word *arthritis* is based on the Greek word *arthron* (joint) + the Greek ending *itis* (inflammation of). In this course of instruction, you will not be asked to memorize long lists of terms. Instead you will learn the meaning of certain prefixes, suffixes, and roots that as word elements make up the common medical terms related to the diagnosis and treatment of cancer. Your knowledge of these word elements and how they are combined to form common medical terms should make even the most complicated medical terminology decipherable. For example, the word pericarditis can be broken down into its word elements as follows:

peri (prefix)	+	card (root)	+	itis (suffix)
------------------	---	----------------	---	------------------

It means:

around	heart	inflammation
--------	-------	--------------

Several roots may be combined along with a prefix and/or suffix to form a word. For example, the word bronchogenic can be broken into the following word elements with, for the sake of ease in pronunciation, a vowel (usually "o") linking the word elements:

bronch (root)	+	o (combining vowel)	+	gen (root)	+	ic (suffix)
------------------	---	------------------------	---	---------------	---	----------------

It means:

any large air passage of lungs	o	forming, producing, condition of
-----------------------------------	---	----------------------------------

There are textbooks on medical terminology, and some of these contain quite a detailed discussion of the origin and make-up of medical terms. Also, your medical dictionary probably will contain a section on the fundamentals of medical etymology<sup>1</sup>. At the very least, you should read this section of your dictionary paying special attention to the list of roots, prefixes, and suffixes.

---

<sup>1</sup>etymology--The study of the history and development of a language.



## PRETEST ON WORD ROOTS

The following word roots will be discussed in this block of instructions. Can you recognize their correct definitions? Place the letter for the correct definition in the blanks to the left of each word root.

	<u>Word Root</u>	<u>Definition</u>
_____	1. (an <sup>1</sup> )esthesio-	a. crab, cancer
_____	2. bi(o)-	b. white
_____	3. carcin(o)-	c. fat
_____	4. hem(a)-	d. growth, formation
_____	5. gno-	e. to feel, perceive
_____	6. leuk(o)-	f. tumor, relationship to tumor
_____	7. lip(o)-	g. life
_____	8. onc(o)-	h. nose
_____	9. -plasm	i. flesh
_____	10. rhin(o)-	j. to know
_____	11. sarc(o)	k. blood
_____	12. gastr(o)	l. stomach
_____	13. oste(o)-	m. urine
_____	14. toxic(o)-	n. bone
_____	15. urin-	o. poison

---

<sup>1</sup>a or an: A prefix signifying without (lack of) or not.

## ANSWERS TO PRETEST

<u>Answer</u>	<u>Word Root</u>	<u>Definitions</u>	<u>Example</u>
<u>e</u>	1. (an)esthesio-	to feel, perceive	anesthesia
<u>g</u>	2. bi(o)-	life	biopsy
<u>a</u>	3. carcin(o)-	crab, cancer	carcinoma <sup>1</sup>
<u>k</u>	4. hem(a)	blood	hematology
<u>j</u>	5. gno-	to know	diagnosis
<u>b</u>	6. leuk(o)-	white	leukocyte
<u>c</u>	7. lip(o)-	fat	liposarcoma
<u>f</u>	8. onc(o)-	tumor, relation- ship to tumor	oncology
<u>d</u>	9. -plasm	growth, formation	neoplasm
<u>h</u>	10. rhin(o)-	nose	rhinorrhea
<u>i</u>	11. sarc(o)-	flesh	sarcoma
<u>l</u>	12. gastr(o)-	stomach	gastrointestinal
<u>n</u>	13. oste(o)-	bone	osteosarcoma
<u>o</u>	14. toxic(o)-	poison	toxicology
<u>m</u>	15. urin-	urine	urinalysis

---

<sup>1</sup>Although the root for this word means cancer or crab, in general usage carcinoma means a malignant epithelial tumor.

Medical terms can be divided into three basic word elements: prefixes, roots (or stems), and suffixes. The root or stem of a medical term usually has been derived from a Greek or Latin noun or verb. This root expresses the basic meaning of the term. However, often that meaning will be modified by the addition of a prefix (at the beginning of the word) or the addition of a suffix (at the end of the word). Frequently a root + a suffix will be used as a suffix and added to another root as a word ending. Some examples are -emia, -genic, -penia, and -pathy. However, two suffixes alone cannot be combined to form a word. Three common medical terms, their roots, and their root definitions are listed below.

<u>Medical Term</u>	<u>Root</u>	<u>Root Definition</u>
tonsillitis	tonsilla	tonsil (Latin tonsilla)
thermal	therm	heat
prognosis	gno	to know

Q1

Check the medical terms in the following list whose roots have been underlined. Use your dictionary when you need to so do.

[x]

[ ] urinalysis      [ ] pathology

[ ] lipoma      [ ] neoplasm

[ ] histology      [ ] carcinoma

Answer: Q1

The terms urinalysis, lipoma, pathology, and neoplasm have their roots underlined.

The root of a term may appear anywhere within the term:

1. at the beginning--e.g., urinalysis and lipoma
2. in the middle--e.g., prognosis and anesthesia
3. at the end--e.g., neoplasm and antitoxin.

A prefix consists of one or two syllables placed before a word in order to modify the meaning of the word. Often these syllables are prepositions or adverbs. Prefixes are commonly used to help describe the appearance of, or the location of, an anatomical part. For example, the term adrenal, the name of a ductless gland above the kidney, is composed of the prefix ad, which means near, and a root renal, which means kidney. Combine the prefix and the root and you get a term that means "near the kidney." Listed below are a few of the prefixes used with common medical terms.

<u>Medical term</u>	<u>Prefix</u>	<u>Prefix Definition</u>
hemiplegia	hemi-	half
hypodermic	hypo-	under
intramuscular	intra-	within

Q2

Check the medical terms in the following list whose prefixes are underlined.

[x]

- |   |   |
|---|---|
| <input type="checkbox"/> [ ] <u>antitoxin</u> | <input type="checkbox"/> [ ] <u>prognosis</u>   |
| <input type="checkbox"/> [ ] <u>bilateral</u> | <input type="checkbox"/> [ ] <u>intravenous</u> |
| <input type="checkbox"/> [ ] <u>cytology</u>  | <input type="checkbox"/> [ ] <u>gingivitis</u>  |

Answer: Q2

The terms antitoxin, bilateral, prognosis, and intravenous have a prefix underlined. The other two terms are composed of a root followed by a suffix.

The prefix anti- means against, bi- means two (not life as in bi(o)), pro- means before or in front of, and intra- means within. The root word cyt(o) means cells and gingiv(o) means gums.

Q3

A true suffix refers to a syllable or a group of syllables attached to the end of a word root (or stem) to modify the meaning of the word root. By adding a suffix to a word root, one may change the meaning of a word, or merely change its grammatical function, i.e., create a noun or an adjective. Following are a few medical terms which contain commonly used suffixes:

<u>Medical Term</u>	<u>Suffix</u>	<u>Suffix Definition</u>
cuboid	-oid	like, resembling, in the form of
glucose	-ose	composed of carbohydrate
dermatitis	-itis	inflammation of
arthrosis	-osis	condition of
hemolysis	-lysis	breakdown, destruction of
cytology	-ology	study of

Check the medical terms in the following list whose suffixes have been underlined.

[x]

- [ ] prognosis                      [ ] poliomyelitis                      [ ] leukemia  
[ ] hypodermic                      [ ] dysentery                      [ ] cervical

Answer: Q3

The terms prognosis, poliomyelitis, leukemia, and cervical have their suffixes underlined. The root -emia (blood) in the word leukemia is actually composed of a root plus a suffix: ((h)emia = blood) + (ia = condition). Since it will invariably appear in this format (emia), we will not subdivide it into various components in this book.

The prefix is underlined in hypodermic, and the root word is underlined in dysentery.

hypodermic    hyp(o) + derm + ic (under the skin)

dysentery     dys + enter(o) + y (painful intestine)

The basic forms of medical terms with examples of each, are described below. Of course, any particular medical term may take on an almost infinite variety of combinations of these three basic forms:

1. A term may be composed of a root + a suffix. As examples:

carcinoma: (carcin(o) = crab) + (oma = tumor)

sarcoma: (sarc(o) = flesh) + (oma = tumor)

cerebral: (cerebr = brain) + (al = pertaining to).

2. A word may be composed of a prefix + a root. As examples:

neoplasm: (neo = new) + (plasm = growth, formation)

biped: (bi = two) + (ped = foot)

dysfunction: (dys = bad, difficult, painful) + (function = normal action).

3. Many medical terms are composed of a prefix + a root + a suffix. As examples:

hypoglycemia: (hypo = under) + (glyc = sugar) + (emia = blood)

encephalitis: (en = in) + (cephal = head) + (itis = inflammation of)

pericarditis: (peri = around) + (card = heart) + (itis = inflammation of)

Some medical terms are composed of two roots. As examples:

biostatistics: (bio) = life) + (statistics = numerical facts)  
erythroblast: (erythr(o) = red) + (blast = germ cell)  
microfilm: (micr(o) = small) + film

The combination of a word root plus a combining vowel as in bio-, erythro-, and micro- is known as the combining form. To indicate a word root and its usual combining vowel, but not in combining form, the vowel appears in parenthesis.

Q4

You already have learned some of the general terms associated with cancer patients and cancer registries. For instance, you have learned that the two basic types of cancer are called carcinoma and sarcoma. An analysis of the word elements of these terms follows:

<u>Medical Term</u>	<u>Word Element</u>	<u>Meaning</u>
carcinoma	carcin	A root meaning cancer, crab
	oma	A suffix meaning tumor
sarcoma	sarc	A root meaning flesh, connective tissue
	oma	A suffix meaning tumor

Terms such as chondroma, lipoma, and cystadenoma refer to \_\_\_\_\_

Answer: Q4

tumors. The suffix oma means "tumor."

Chondroma, lipoma, and cystadenoma are examples of benign tumors. Chondroma is a bone tumor, lipoma is a fat tumor, and cystoma is a tumor containing cysts of neoplastic origin.

Q5

You have learned also that the suffix ology means the "science of" or the "study of." Thus, psychology is the study of the mind or psyche. Hematology is the study of the blood (hem(a) is a root meaning blood). Therefore, knowing that the root onco means "tumor, relationship to tumor." You should be able to infer that the term "oncology" means:

[x]

[ ] a. The study of malignant growths.

[ ] b. The study of benign tumors.

[ ] c. The study of new growths.

[ ] d. All of the above.

Answer: Q5

d--All of the above. The term oncology is a general term referring to the study of all types of benign and malignant growths or tumors.

Q6

The term neoplasm (neo + plasm) has been used often in this course of instruction. This term is composed of a single prefix and a single root. What is the root? (Select one.)

The meaning of this root is new/growth, formation. (Select one.)

Answer: Q6

You should have selected "plasm" as the root. Plasm means "growth, formation." Neoplasm generally is defined as a new growth.

Q7

Now let us learn a few of the roots and suffixes associated with the symptoms of a patient with cancer. While doing this you will also learn a few root names for parts of the anatomy.

Suppose as the result of a cold, you have a runny nose. Your doctor might call this condition rhinorrhea:

rhin(o) - a root meaning nose

rrhea - a suffix meaning flow, discharge

Which of the following terms would you say is a legitimate word?

[x]

[ ] a. rhinology

[ ] b. itisology

Answer

Q7

a--Rhinology refers to the study of the nose. More important, however, you should remember that two suffixes cannot be combined to form a word. Itis and ology are both suffixes.

Q8

To review, match each of the definitions on the right with a root or suffix on the left.

Root/Suffix

Definition

- |                |  |
|----------------|--|
| _____ 1. sarc  | a. A suffix meaning new                        |
| _____ 2. oma   | b. A root meaning stomach                      |
| _____ 3. onco  | c. A suffix meaning tumor                      |
| _____ 4. gastr | d. A root meaning flesh                        |
| _____ 5. rrhea | e. A root meaning tumor, relationship to tumor |
|                | f. A suffix meaning flow, discharge            |

Answer: Q8

<u>Answer</u>	<u>Root/Suffix</u>	<u>Root Definition</u>
1--d	sarc	A root meaning flesh
2--c	oma	A suffix meaning tumor
3--e	onco	A root meaning tumor, relationship to tumor
4--b	gastr	A root meaning stomach
5--f	rrhea	A suffix meaning flow, discharge

**POST-TEST**

1. For each word listed below, is the underlined word element a root or a suffix?

a. hematuria \_\_\_\_\_

b. osteogenic \_\_\_\_\_

c. leukocytosis \_\_\_\_\_

d. cytopathology \_\_\_\_\_

e. mastitis \_\_\_\_\_

f. cytoplasm \_\_\_\_\_

2. a. Which word means like, resembling, or in the form of?

1. pathogenic
2. keratosis
3. lymphoid
4. gastritis

\_\_\_\_\_

b. Which word refers to a condition of?

1. enteritis
2. lymphocytosis
3. spondylolysis
4. leukopenia

\_\_\_\_\_

c. Which word refers to the breakdown of or destruction of something?

1. bronchitis
2. ostealgia
3. hysterolysis
4. oncology

\_\_\_\_\_

d. Which word refers to a carbohydrate?

1. myxorrhea
2. cellulose
3. mastalgia
4. cephaloid

\_\_\_\_\_

e. Which word refers to flow or discharge of something?

1. adenitis
2. gonorrhea
3. metrorrhagia
4. arthralgia

\_\_\_\_\_

3. a. A word referring to feeling, sensation:

1. rhinopharyngeal
2. hemangioma
3. anesthesia
4. enterolysis

---

b. A word referring to white:

1. rhabdosarcoma
2. hemangioma
3. leukocytosis
4. melanoma

---

c. A word referring to flesh:

1. oncogenesis
2. biopsy
3. hematemesi
4. sarcoma

---

d. A word referring to know:

1. pathology
2. diagnosis
3. biopsy
4. adipose

---

e. A word referring to fat:

1. osteosarcoma
2. lipoma
3. oncogenesis
4. mastectomy

---

## ANSWERS TO POST-TEST (Pages 27-29)

### Question 1.

	<u>Word Element</u>	<u>Type of Element</u>
1a.	ur	a root
1b.	genic	a suffix
1c.	osis	a suffix
1d.	ology	a suffix
1e.	itis	a suffix
1f.	plasm	a root

### Question 2.

- 2a. "3" -- lymphoid. -oid means like, resembling. in the form of
- 2b. "2" -- lymphocytosis. -osis refers to a condition of
- 2c. "3" -- hysteresis. -lysis refers to the breakdown, destruction of something
- 2d. "2" -- cellulose. -ose refers to a carbohydrate
- 2e. "2" -- gonorrhea. -rrhea means flow, discharge

### Question 3.

- 3a. "3" -- anesthesia. -esthesio- refers to feeling, sensation
- 3b. "3" -- leukocytosis. leuk(o)- refers to white
- 3c. "4" -- sarcoma. sarc(o)- means flesh
- 3d. "2" -- diagnosis. gno- means to know; dia- means through
- 3e. "2" -- lipoma. lip- refers to fat

**SECTION C**  
**COMMON SYMPTOMATIC SUFFIXES**



## SECTION C

### COMMON SYMPTOMATIC SUFFIXES

There are thousands of major and minor things which can occur to a human body. Each disease and pathological condition is described by a specific medical term. Often similar symptoms and pathological conditions can occur in different parts of the body. It is convenient, therefore, to have word elements which describe certain common conditions. For example, the word element -algia means "pain" or "ache" which can be combined with other word elements referring to parts of the body. Thus, myalgia refers to a pain or ache in a muscle or muscles. The pretest on the next page lists 12 suffixes (or roots + suffixes used as suffixes) which often are components of words used to describe symptomatic conditions. Take this pretest and determine how many of these suffixes you can define.



## PRETEST ON SYMPTOMATIC SUFFIXES

The following suffixes will be discussed in the next block of material. How many can you define?

	<u>Suffix</u>	<u>Definition</u>
_____ 1.	-algia	a. like, resembling, in the form of
_____ 2.	-genic	b. tumor
_____ 3.	-itis	c. forming, producing, or productive of
_____ 4.	-lysis	d. flow, discharge
_____ 5.	-penia	e. pain, ache
_____ 6.	-oid	f. destruction, breakdown of
_____ 7.	-ology	g. lack of, deficiency
_____ 8.	-oma	h. condition of
_____ 9.	-ose	i. burst forth, excessive flow
_____ 10.	-osis	j. study of
_____ 11.	-rrhage	k. inflammation of
_____ 12.	-rrhea	l. composed of carbohydrate

## ANSWERS TO PRETEST

<u>ANSWER</u>		<u>Suffix</u>	<u>Definition</u>
<u>e</u>	1.	-algia	pain, ache
<u>c</u>	2.	-genic	forming, producing, or productive of
<u>k</u>	3.	-itis	inflammation of
<u>f</u>	4.	-lysis	destruction, breakdown of
<u>g</u>	5.	-penia	lack of, deficiency
<u>a</u>	6.	-oid	like, resembling, in the form of
<u>j</u>	7.	-ology	study of
<u>b</u>	8.	-oma	tumor
<u>l</u>	9.	-ose	composed of carbohydrate
<u>h</u>	10.	-osis	condition of
<u>i</u>	11.	-rrhage	burst forth, excessive flow
<u>d</u>	12.	-rrhea	flow, discharge

Q9

Probably you have heard of the term neuralgia which means to have a pain in a nerve (neuron). The suffix -algia means pain. Also, anyone who listens to TV has seen mouthwash ads which claim to prevent halitosis. In this word the root halitus means an expired breath and the suffix -osis means "condition of."

With this information you should be able to determine that:

1. A nervous condition might be described by the term:

a. neurosis

b. psychosis

c. neither term

d. both terms

2. An earache might be described by the term:

a. othygroma

b. otalgia

c. otitic

d. othemorrhea

Answer: Q9

1. d--Both terms contain the suffix -osis which means condition of. The root elements neur(o) and psych(o) refer, respectively, to "nerve" and "mind."
2. b--Otalgia is the only term containing the suffix -algia which means painful, ache. Ot(o) is the word root for ear.

Q10

**Metr(o) is a root word which refers to the uterus. The term meaning to have a discharge from the uterus is:**

[x]

[ ] a. metritis

[ ] b. metrorrhea

[ ] c. metrorrhagia

[ ] d. metralgia

Answer: Q10

b--metrorrhea, which is composed of:

metr(o) - root word meaning uterus

rrhea - a suffix meaning flow, discharge

Q11

Perhaps you have noticed that the suffix -rrhea seems to be similar to the suffix -rrhage which appears in such terms as hemorrhage. Well,

-rrhea means flow, discharge

-rrhagia means to burst forth, excessive flow

Thus, you might describe an abnormal uterine hemorrhage a condition of (select one).

a. metrorrhea

b. metrorrhagia

**Answer: Q11**

**metrorrhagia=a bursting forth of blood from the uterus; uterine bleeding occurring at completely irregular intervals, the period of flow sometimes being prolonged.**

**You may be more familiar with the term menorrhagia which is composed of the word root for month (men(o)-) and the suffix -rrhagia meaning excessive menstrual flow.**

Already you have been introduced to the term pathology (pathos = disease) + (ology = science of, the study of). You have also probably seen the term pathogenic, composed of the root path(o) and the suffix -genic. This suffix appears at the end of many medical terms and means forming, producing or productive of. Thus:

- neurogenic means forming in nerves (neuro-)
- osteogenic means forming in the bones (osteo-)
- pathogenic means disease-producing (patho-)

Q12

Which of the above three words cannot be defined directly from a knowledge of the meaning of roots and suffixes? \_\_\_\_\_.

Answer: Q12

pathogenic. A literal combination of root and suffix meanings would give the definition of "originating in the disease." You should not be surprised when the combined definitions of the elements of a medical term do not provide an exact definition of the term itself. Very often this will be the case, For example:

anemia, with the prefix an-, meaning without, and the root -emia, meaning blood, is defined as "a deficiency of red blood cells " (not an absence of blood).

Q13

A term meaning "forming in the bronchi" is:

[x]

[ ] a. bronchitis

[ ] b. bronchorrhagia

[ ] c. bronchorrhaphy

[ ] d. bronchogenic

Answer: Q13

d--bronchogenic. This term is composed of the root bronch(o) (any large air passage of lungs) and the suffix -genic (forming). Notice that when two word elements are combined, letters may be added or dropped so as to make the term easier to pronounce, as in this example where a combining vowel of "o" is added to the root "bronch."

In other instances, if the root word ends in a vowel, change that vowel to an "o" or simply add the combining vowel "o."

anesthesia + logy (study of) = anesthesiology

hema (blood) + globin (protein of) = hemoglobin

cardi (heart) + gram (written or recorded) = cardiogram

The vowels a, e, i, u and y may also be used as combining vowels. As examples:

brach(y) (short) + cardi (heart) + a = brachycardia

oste(o) (bone) + arthr (joint) + itis (inflammation of) = osteoarthritis

Q14

There are special books on medical vocabulary which describe the derivation and composition of medical terms. Suppose you knew that the term leukopenia was composed of the root leuko (meaning white) and the suffix -penia which you did not know. Using your dictionary, define the suffix -penia.

Answer: Q14

You can find penia which is defined as a word termination indicating an abnormal reduction in number or a "lack." Thus, by inference, you define -penia as a deficient or decreased state or condition. Leukopenia means deficiency of white blood cells. Similarly the term cytopenia refers to deficiency in the cellular elements of the blood.

Q15

Sometimes you will encounter symptomatic terms such as lipoid and fibroid. According to your dictionary, the suffix -oid means:

[x]

[ ] a. cell

[ ] b. in the form of, like

[ ] c. mouth

[ ] d. circle

Answer: Q15

b--oid means like, resembling, in the form of. Thus, lipoid means fatty or fat-like: (lip = fat)  
+ (-oid = in the form of).

Q16

A term meaning "deficiency of white blood cells" would most likely be:

a. leukemia

b. leukocyte

c. leukopenia

d. leukemoid

Answer: Q16

c--leukopenia: (leuk(o)- = white) + (-penia = lack of, deficiency of).

Q17

Let us introduce you to the suffix -lysis which means "dissolution", or "breaking down." Thus, hemolysis: (hemo = blood) + (-lysis = breaking down) means breaking down of red blood cells. Which of the following terms refers to the destruction or disintegration of something?

a. myolysis

b. cytolysis

c. hepatolysis

d. all of the above

e. none of the above

Answer: Q17

d--all of the above. All terms contain the suffix-lysis which means dissolution of, breaking down of. My(o) means muscle, cyt(o) means cells, and hepat(o) means liver.

Q18

Most of the suffixes covered so far can be combined with lip(o), the root meaning fat. Match the terms on the left with the definitions on the right.

<u>Term</u>	<u>Definitions</u>
___ 1. lipoid	a. A tumor made up of fat cells.
___ 2. lipoma	b. Forming, producing, or caused by fat.
___ 3. lipomatosis	c. Fatlike, resembling fat.
___ 4. lipogenic	d. A condition characterized by tumorlike fat accumulations in the tissue.

Answer: Q18

1. c: -oid means like, resembling, in the form of
2. a: -oma means tumor
3. d: -osis means condition of
4. b: -genic means forming, producing, or productive of

<u>Term</u>	<u>Definition</u>
lipoid	Fatlike, resembling fat
lipoma	A tumor made up of fat cells
lipomatosis	A condition characterized by tumor-like fat accumulations in the tissue
lipogenic	Forming, producing, or caused by fat

Q19

You also will find the word element leuk(o) (white) combined with many suffixes. Often the suffix will be added to the combination root leukocyte which means "white blood cell." Match the terms on the left with the definitions on the right.

	<u>Term</u>	<u>Definition</u>
_____	1. leukocytosis	a. Profuse leukorrhea
_____	2. leukocytopenia	b. A condition characterized by an increase in white blood cells
_____	3. leukocytolysis	c. Abnormal reduction in number of white blood cells
_____	4. leukorrhagia	d. The destruction of leukocytes

Answer: Q19

1. b: -osis means condition of
2. c: -penia means deficiency of or decrease in
3. d: -lysis means the dissolution of or destruction of
4. a: -rrhagia refers to bursting forth, excessive flow of

<u>Term</u>	<u>Definition</u>
leukocytosis	A condition characterized by an increase in white blood cells
leukocytopenia	Abnormal reduction in number of white blood cells
leukocytolysis	The destruction of leukocytes
leukorrhagia	Profuse leukorrhea

Q20

1. All of us are familiar with gastrointestinal disorders. Thus, a stomachache might be described by a word ending with the suffix:

a. -genic

b. -osis

c. -oid

d. -algia

2. Sometimes this will lead to a condition of "abnormal frequency and liquidity of fecal discharges." This condition is described by a term ending with the suffix:

a. -lysis

b. -rrhage

c. -rrhea

d. -penia

Answer: Q20

1. d: -algia, a suffix meaning pain or ache. The medical term for stomachache is gastralgia: (gastr = stomach) + (-algia = pain).
2. c: -rrhea, a suffix meaning flow, discharge. The term diarrhea is used to describe a watery bowel movement. The prefix dia- means through, apart, across or between.

## POST-TEST ON WORD ROOTS AND SYMPTOMATIC SUFFIXES

The following Post-test should provide you with a good indication as to whether or not you now know the meaning of each of the word elements covered in Sections B and C. Match the word elements listed on the left with the definitions listed on the right:

<u>Word Elements</u>	<u>Definition</u>
_____ 1. -lysis	a. crab cancer
_____ 2. -hem(a)	b. flesh
_____ 3. -rhin(o)	c. white
_____ 4. -onc(o)	d. tumor
_____ 5. -itis	e. to know
_____ 6. -osis	f. fat
_____ 7. -carcin(o)-	g. like, resembling, in the form of
_____ 8. -rrhea	h. composed of carbohydrates
_____ 9. gno-	i. growth, formation
_____ 10. -ose	j. lack of, deficiency
_____ 11. -genic	k. flow, discharge
_____ 12. -leuk(o)	l. to feel, perceive
_____ 13. -oid	m. burst forth, excessive flow
_____ 14. -ology	n. destruction, breakdown of
_____ 15. -lip(o)	o. tumor, relationship to tumor
_____ 16. -rrhage	p. blood
_____ 17. (an)esthesio-	q. inflammation of
_____ 18. -plasm	r. life
_____ 19. -algia	s. forming, producing, or productive of
_____ 20. -oma	t. condition of
_____ 21. sarc(o)-	u. nose
_____ 22. bi(o)-	v. study of
_____ 23. -penia	w. painful, ache

## ANSWERS TO PRETEST

<u>ANSWER</u>	<u>Word Element</u>	<u>Definition</u>
<u>n</u>	1. -lysis	destruction, breakdown of
<u>p</u>	2. -hem(a)	blood
<u>u</u>	3. rhin(o)-	nose
<u>o</u>	4. onc(o)-	tumor, relationship to tumor
<u>q</u>	5. -itis	inflammation of
<u>t</u>	6. -osis	condition of
<u>a</u>	7. carcin(o)-	crab, cancer
<u>k</u>	8. -rrhea	flow, discharge
<u>e</u>	9. gno-	to know
<u>h</u>	10. -ose	composed of carbohydrates
<u>s</u>	11. -genic	forming, producing, or productive of
<u>c</u>	12. -leuk(o)	white
<u>g</u>	13. -oid	like, resembling, in the form of
<u>v</u>	14. -ology	study of
<u>f</u>	15. lip(o)	fat
<u>m</u>	16. -rrhage	burst forth, excessive flow
<u>l</u>	17. (an)esthesio-	to feel, perceive
<u>i</u>	18. -plasm	growth, formation
<u>w</u>	19. -algia	painful, ache
<u>d</u>	20. -oma	tumor
<u>b</u>	21. sarc(o)	flesh
<u>r</u>	22. bi(o)-	life
<u>j</u>	23. -penia	lack of, deficiency

**SECTION D**  
**COMMON DIAGNOSTIC SUFFIXES**



## SECTION D

### COMMON DIAGNOSTIC SUFFIXES

There are numerous suffixes commonly used with diagnostic terms. Terms using these suffixes will be found in the record of a patient's history and physical examination. An understanding of the meaning of these suffixes will help you abstract the medical records. First take the pretext below. A similar test will be given at the end of this block of instruction.

#### PRETEST ON DIAGNOSTIC SUFFIXES

Match the suffixes listed on the left with the definitions listed on the right.

	<u>Suffixes</u>	<u>Definition</u>
_____	1. -cele	a. inflammation of
_____	2. -emia	b. stricture, narrowing
_____	3. -ectasis	c. hernia, protrusion
_____	4. -(i)asis	d. falling
_____	5. -itis	e. blood
_____	6. -plegia	f. stroke, blow, paralysis
_____	7. -poiesis	g. expansion, dilatation
_____	8. -rrhexis	h. condition, formation of
_____	9. -stenosis	i. rupture
_____	10. -ptosis	j. production of

## ANSWERS TO PRETEST

<u>ANSWER</u>	<u>Suffixes</u>	<u>Definition</u>
<u>c</u>	1. -cele	hernia, protrusion
<u>e</u>	2. -emia	blood
<u>g</u>	3. -ectasis	expansion, dilatation
<u>h</u>	4. -(i)asis	condition, formation of
<u>a</u>	5. -itis	inflammation of
<u>f</u>	6. -plegia	stroke, blow, paralysis
<u>j</u>	7. -poiesis	production of
<u>i</u>	8. -rrhexis	rupture
<u>b</u>	9. -stenosis	stricture, narrowing
<u>d</u>	10. -ptosis	falling

Q21

Cyst(o)- is a word root meaning "bladder or sac." Which of the following terms means inflammation of the bladder?

[x]

[ ] a. cystolithiasis

[ ] b. cystitis

[ ] c. cystocele

Answer: Q21

b--cystitis means inflammation of the bladder. The suffix *-itis* means inflammation of.

The term *cystolithiasis* (*iasis* = formation of + *lith* = stone) means a condition associated with the formation of bladder stones or calculi. The term *cystocele* (*-cele* = hernia, protrusion) means a hernial protrusion of the urinary bladder through, for example, the vaginal wall in females.

You will note that the suffix "*-(i)asis*" and the suffix "*-osis*" are both forms of the ending "*-sis*" meaning state or condition of.

Q22

Laryng(o)- is a word root meaning larynx. Select the term below that refers to paralysis of the larynx. Use your dictionary if you have to, or study the answers to the Pretest.

[x]

[ ] a. laryngitis

[ ] b. laryngocele

[ ] c. laryngoplegia

Answer:

Q22

c--laryngoplegia, which means paralysis of the larynx. The suffix -plegia means stroke, blow, paralysis.

Q23

The suffix -rrhexia means rupture. A ruptured spleen would be referred to as:

[x]

[ ] a. gastrorrhexis

[ ] b. hepatorrhexis

[ ] c. neither

[ ] d. either

Answer:

Q23

c--neither. Splenorrhexis is the term for ruptured spleen.

Gastrorrhexis means rupture of the stomach: (gastr(o) = stomach) + (-rrhexis = rupture).

Hepatorrhexis means rupture of the liver: (hepat(o) = liver) + (-rrhexis = rupture).

Q24

The word root bronch(o)- is derived from the term bronchus which is a branch of the trachea or windpipe. Inflammation of the bronchial tubes would be known as:

[x]

[ ] a. bronchiectasis

[ ] b. bronchostenosis

[ ] c. bronchitis

Answer:

Q24

c--bronchitis is the term for inflammation of the bronchial tubes. The suffix -itis means inflammation of.

bronchiectasis (-ectasis = dilatation) is a term meaning dilatation of a bronchus. bronchostenosis (-stenosis = stricture, narrowing) means stricture or abnormal diminution of the caliber of a bronchial tube.

Q25

You learned that the suffix -cele is used to refer to a hernia or protrusion. As an example, a hernial protrusion of a part of the pharynx would be called a pharyngocele. Match the terms on the left with the definitions on the right. Use your dictionary if you need to do so.

<u>Term</u>		<u>Definition</u>
_____	1. esophagocele	a. A protrusion of the rectum, for example, into the vagina in females
_____	2. gastrocele	b. A hernial protrusion of the bladder, for example, through the vaginal wall in females
_____	3. proctocele	c. A hernia containing a loop of intestine
_____	4. enterocele	d. Esophageal hernia
_____	5. cystocele	e. Hernia of the stomach

Answer:

Q25

<u>ANSWER</u>	<u>Term</u>	<u>Definition</u>
<u>d</u> 1.	esophagocele	Esophageal hernia
<u>e</u> 2.	gastrocele	Hernia of the stomach
<u>a</u> 3.	proctocele	Protrusion of the rectum, for example, into the vagina in females (also known as rectocele)
<u>c</u> 4.	enterocele	A hernia containing a loop of intestine
<u>b</u> 5.	cystocele	A hernial protrusion of the bladder, for example, through the vaginal wall in females

Q26

The suffix -ectasis, meaning expansion or dilatation, is used to indicate the abnormal dilatation or expansion of a structure or an organ of the body--for example:

1. Angiectasis is defined as a dilatation of a blood vessel (angi = blood vessel).
2. Bronchiectasis is defined as a chronic dilatation of the bronchi or bronchioles.
3. Pharyngectasis is defined as a hernial protrusion (dilatation) of a part of the pharynx.

So, the suffix -ectasis means expansion or dilatation. Which of the words listed below has a meaning very similar to the term pharyngectasis?

[x]

[ ] a. pharyngoplegia

[ ] b. pharyngocele

[ ] c. phryngostenosis

Answer: Q26

b--pharyngocele (-cele = hernia, protrusion), a term for a hernial protrusion of a part of the pharynx. Pharyngoplegia (-plegia = paralysis) means paralysis of the muscles of the pharynx. Pharyngostenosis (-stenosis = constriction, narrowing) means a narrowing of the lumen of the pharynx.

Terms like hematuria, hemoptysis, and hemorrhage begin with the word root hem- which means blood. This root also is used as a suffix and when so used, the syllable -ia is added to it to produce -emia. Thus, the term polycythemia means abnormal increase of red blood cells and hemoglobin in the blood. Sometimes the h is omitted, such as in the word hyperglyc(h)emia which means abnormally high blood sugar.

Q27

Can you think of a condition with the suffix -emia which is characterized by an abnormal reduction in red blood cells? \_\_\_\_\_

**Answer: Q27**

**anemia: (an = not) + ((h)em = blood) + (ia)**

**A root word for red is erythr(o). Deficiency of red blood cells is known as erythropenia.**

Q28

You should now be able to recognize the meaning of the following suffixes. Match the suffix on the left with the definition on the right.

<u>Suffix</u>	<u>Definition</u>
___ 1. -cele	a. expansion, dilatation
___ 2. -emia	b. condition, formation of
___ 3. -itis	c. hernia, protrusion
___ 4. -plegia	d. stroke, blow, paralysis
___ 5. -rrhexis	e. inflammation of
	f. blood
	g. falling
	h. constriction, narrowing
	i. rupture

Answer: Q28

<u>ANSWER</u>	<u>Suffix</u>	<u>Definition</u>
<u>c</u>	1. -cele	hernia, protrusion
<u>f</u>	2. -emia	blood
<u>e</u>	3. -itis	inflammation of
<u>d</u>	4. -plegia	stroke, blow, paralysis
<u>i</u>	5. -rrhexis	rupture

You have seen the term bronchiectasis (bronch = bronchial tubes of the lung) + ( -ectasis = expansion, dilatation). This is a condition characterized by the chronic dilatation of the bronchi. The suffix -ectasis means dilatation; the suffix -stenosis means constriction or narrowing. Therefore, a condition opposite to bronchiectasis would be bronchostenosis--the stricture or abnormal diminution of the caliber (diameter) of the bronchi.

Q29

Select the word which is described in each of the following statements:

- a. Emphysema, abnormal swelling or inflation of the lungs, is known also as pneumonectasis/pharyngostenosis. (Circle one.)
- b. A tumor located near an artery could expand causing the artery to be constricted. Such a condition would be known as arteriostenosis/arteriectasis. (Circle one.)

Answer: Q29

You should have said:

- a. pneumonectasis: -ectasis means dilatation, expansion, inflation. (See under -ectasia in your dictionary.) Pneum(o)- means relationship to lung, air or to breath.
- b. arteriostenosis: -stenosis means constriction or narrowing. Arteri(o)- means artery.

You know that two different medical terms can have the same meaning. Two different suffixes can also have the same or similar meanings. An example is the suffix -(i)asis (condition of, formation of, presence of) and the suffix -poiesis (formation of, production of). Some words using these two terms are:

1. lithiasis--formation of stones
2. nephrolithiasis--formation of stones in the kidney
3. hemopoiesis--the formation and development of blood cells

Sometimes, -poiesis will be changed to another form by using -tic instead of -sis, as in the word hematopoietic.

Q30

Match the terms on the left with the definitions on the right.

<u>Term</u>	<u>Definition</u>
_____ 1. broncholithiasis	a. A condition marked by the presence of kidney stones
_____ 2. gastrolithiasis	b. Presence or formation of calculi or other concretions in the stomach
_____ 3. cholelithiasis	c. Condition in which calculi are formed in the bronchi
_____ 4. pneumolithiasis	d. The presence of concretions in the lung
_____ 5. nephrolithiasis	e. Condition associated with the formation of gallstones

Answer: Q30

<u>ANSWER</u>	<u>Term</u>	<u>Definition</u>
<u>c</u>	1. broncholithiasis	Condition in which calculi are formed in the bronchi
<u>b</u>	2. gastrolithiasis	Presence or formation of calculi or other concretions in the stomach
<u>e</u>	3. cholelithiasis	A condition associated with the formation of gallstones
<u>d</u>	4. pneumolithiasis	The presence of concretions in the lungs
<u>a</u>	5. nephrolithiasis	Condition marked by the presence of kidney stones

Q31

The suffix -osis means condition of. Another suffix meaning "condition of" is:

[x]

[ ] a. -ectasis

[ ] b. -itis

[ ] c. -(i)asis

[ ] d. -stenosis

Answer: Q31

c--(i)asis

Q32

Some of the things which can happen to the body are listed below in the left column. Based on your knowledge of the meaning of suffixes, match these descriptions with the technical terms on the right.

<u>Definition</u>	<u>Term</u>
_____ 1. A shrinkage of the stomach	a. pneumonectasis
_____ 2. A prolapse of the uterus	b. gastrostenosis
_____ 3. Protrusion of a part of the pharynx	c. thoracostenosis
_____ 4. Dilatation of the bronchus	d. bronchiectasis
_____ 5. Emphysema of the lung	e. pharyngocele
_____ 6. Abnormal contraction of chest wall	f. metroptosis

Answer: Q32

<u>ANSWER</u>		<u>Definition</u>	<u>Term</u>
<u>b</u>	1.	A shrinkage of the stomach	gastrostenosis
<u>f</u>	2.	A prolapse of the uterus	metroptosis
<u>e</u>	3.	Protrusion of a part of the pharynx	pharyngocele
<u>d</u>	4.	Dilatation of the bronchus	bronchiectasis
<u>a</u>	5.	Emphysema of the lung	pneumonectasis
<u>c</u>	6.	Abnormal contraction of chest wall	thoracostenosis

Q33

To complete this instructional section, assume that a student has just taken the test which appears at the beginning of this block of instruction. The student's answers are presented below. State which answers are correct and which are incorrect.

<u>Your Answer</u>	<u>Suffix</u>	<u>Student's Answer</u>
_____	1. -cele	hernia, protrusion
_____	2. -ectasis	rupture
_____	3. -emia	blood
_____	4. -(i)asis	condition, formation of
_____	5. -itis	inflammation of
_____	6. -plegia	stroke, blow, paralysis
_____	7. -poiesis	production of
_____	8. -ptosis	falling
_____	9. -rrhexis	stricture, narrowing
_____	10. -stenosis	expansion, dilatation

Answer: Q33

<u>Answer</u>		<u>Suffix</u>	<u>Correct Answer</u>
correct	1.	-cele	hernia, protrusion
incorrect	2.	-ectasis	expansion, dilatation
correct	3.	-emia	blood
correct	4.	-(i)asis	condition, formation of
correct	5.	-itis	inflammation of
correct	6.	-plegia	stroke, blow, paralysis
correct	7.	-poiesis	production of
correct	8.	-ptosis	falling
incorrect	9.	-rrhexis	rupture
incorrect	10.	-stenosis	stricture, narrowing

**SECTION E**

**CANCER REGISTRAR VOCABULARY: COMPLAINTS AND SYMPTOMS**



## SECTION E

### CANCER REGISTRAR VOCABULARY: COMPLAINTS AND SYMPTOMS

A medical record is composed of a number of sections. The first section contains a description of the patient's complaints and symptoms, the medical history of the patient, the findings of a physical examination of the patient, and the impressions of the examining physician regarding the diagnosis of the patient's illness.

You should be cautioned that each medical record will be slightly different. The order in which information is recorded will be slightly different and sometimes certain items of information will not be found in the medical record as more patients are diagnosed and/or treated in the physician's office or in a clinic. It must also be noted that medical practitioners are not noted for their penmanship. Indeed, perhaps one of the most difficult aspects of medical record abstracting is deciphering the physician's handwriting. This will be less of a problem as more hospitals computerize the medical record. The United States military is considering a computerized system called Composite Health Care System (CHCS). Army hospitals in Kentucky and Hawaii began developing the system in 1988 as well as Navy and Air Force facilities. Now the system is being tested in Walter Reed Medical Center, the Army's largest teaching hospital. It will eventually be installed throughout military medical centers--a total of 125 hospitals in the United States.

The first entry in the record is usually a description of the chief complaint (CC) of the patient, i.e., the reason the patient sought medical attention. The description of the present illness (PI) which follows includes a description of the onset of the illness and the symptoms associated with it. In the following pretest you will find many words which are used to describe common symptoms. See how many of them you can match. If you have trouble, use your medical dictionary.



## PRETEST ON COMPLAINTS AND SYMPTOMS

This block of instructions will cover 16 medical terms. Some of these terms you may know already. To find out for yourself which ones you know, take the pretest below. It is quite similar to the one you will take at the end of this section.

<u>Term</u>	<u>Definition</u>
_____ 1. acromegaly	a. Loss of appetite
_____ 2. angina pectoris	b. Inability to breathe except in an upright position
_____ 3. anorexia	c. Sudden loss of strength, as in fainting
_____ 4. diarrhea	d. Spitting up or coughing up of blood
_____ 5. dysphagia	e. Abnormal enlargement of extremities
_____ 6. dyspnea	f. Abnormal frequency of intestinal discharge
_____ 7. dysuria	g. Difficult breathing
_____ 8. hematemesis	h. Passage of black, bloody stools
_____ 9. hematuria	i. Itching
_____ 10. hemoptysis	j. A disease condition marked by brief paroxysmal attacks of chest pain caused by deficient oxygenation of heart muscles
_____ 11. hirsutism	k. Abnormal hairiness, especially in women
_____ 12. melena	l. Painful urination
_____ 13. nocturia	m. Discharge of blood in the urine
_____ 14. orthopnea	n. Difficulty in swallowing
_____ 15. pruritis	o. The vomiting of blood
_____ 16. syncope	p. Excessive urination at night

## ANSWERS TO PRETEST

	<u>Term</u>	<u>Definition</u>
<u>e</u>	1. acromegaly	Abnormal enlargement of extremities
<u>j</u>	2. angina pectoris	A disease condition marked by brief paroxysmal attacks of chest pain caused by deficient oxygenation of heart muscles
<u>a</u>	3. anorexia	Loss of appetite
<u>f</u>	4. diarrhea	An abnormal frequency of intestinal discharge
<u>n</u>	5. dysphagia	Difficulty in swallowing
<u>g</u>	6. dyspnea	Difficulty in breathing
<u>l</u>	7. dysuria	Painful urination
<u>o</u>	8. hematemesis	The vomiting of blood
<u>m</u>	9. hematuria	Discharge of blood in the urine
<u>d</u>	10. hemoptysis	Spitting up or coughing up of blood
<u>k</u>	11. hirsutism	Abnormal hairiness, especially in women
<u>h</u>	12. melena	Passage of black, bloody stools
<u>p</u>	13. nocturia	Excessive urination at night
<u>b</u>	14. orthopnea	Inability to breathe except in an upright position
<u>i</u>	15. pruritus	Itching
<u>c</u>	16. syncope	Sudden loss of strength, as in fainting

Some form of unusual bleeding or discharge is often associated with cancer of the digestive system or respiratory system. Some type of hemorrhaging might occur which appears as blood in the urine (hematuria) or as bloody stools (melena). Also, the patient might be spitting up blood, a condition known as hemoptysis. Four terms describing some type of unusual bleeding are:

hematuria

hemat--a stem meaning blood  
ur--a stem referring to urine  
ia--a suffix meaning condition of

Definition: Condition of blood in the urine

hemoptysis

hemo--a stem meaning blood  
ptysis--stem referring to spitting  
sis--a suffix referring to condition of

Definition: A condition characterized by the spitting up or coughing up of blood

melena

from "melas," a root meaning black

Definition: The passage of black, tarry stools containing blood. (When blood oxidizes, it becomes black.)

hematemesis

hemat--a stem meaning blood  
emesis--a suffix meaning to vomit

Definition: The vomiting of blood

Q34

A 52-year-old male has experienced a marked loss of weight during the past month. He denies loss of appetite but on occasion has coughed up blood. He denies a history of ulcers or any previous history of internal hemorrhaging.

What are the two symptoms contained in the above description?

1. \_\_\_\_\_

2. \_\_\_\_\_

**Answer:** Q34

**The symptoms are:**

- 1. Weight loss.**
- 2. Coughing up blood (hemoptysis).**

One of the early signs of lung cancer or cancer of the pharynx or larynx might be a persistent cough or hoarseness. This may be accompanied by swallowing difficulty.

The term cough and hoarseness are familiar terms but the term dysphagia probably is not. Dysphagia is made up of:

- dys--a prefix meaning bad, difficult, painful
- phag--a stem meaning to eat
- ia--a suffix meaning condition of

The prefix dys is a very important one; memorize it. Dysphagia means difficulty in eating or swallowing.

Q35

A patient's symptoms were as follows: anorexia; loss of weight; pallor. He denied any passing of blood in the urine. He denied evidence of bloody stools or dysphagia. Based on these symptoms, are the following statements TRUE or FALSE? (Circle one.)

- T    F    a.    The patient had loss of appetite.
- T    F    b.    The patient had difficulty swallowing.
- T    F    c.    The patient had hematuria.

**Answer:** Q35

- a. True. "Anorexia means loss of appetite.
- b. False. "Denied dysphagia" means patient denied swallowing difficulty.
- c. False. "Denied any passing of blood in the urine" means patient denied hematuria.

Q36

What does the prefix "dys" mean? \_\_\_\_\_

Answer: Q36

The prefix dys means bad, difficult, painful--for example, dysphagia means difficulty or pain in swallowing.

Q37

The prefix dys is used frequently, and you will often have occasion to look in your medical dictionary for the meaning of a term beginning with dys. Approximately 300 such words are listed in your dictionary. Suppose you encountered the terms dyschezia, dysopia, and dystaxia. What does each term mean?

- a. dyschezia: \_\_\_\_\_
- b. dysopia: \_\_\_\_\_
- c. dystaxia: \_\_\_\_\_

**Answer:** Q37

- a. dyschezia--Painful or difficult evacuation of feces
- b. dysopia--Defective vision
- c. dystaxia--Difficulty in controlling voluntary movement

Often a cancer patient will report he experienced a general weakness or loss of strength, or a feeling of fatigue. The term syncope refers to a sudden loss of strength which often results in fainting or loss of consciousness. If a patient says he has had dizzy spells but has not fainted, this can be recorded as dizzy spells. However, if a sudden loss of strength (possibly with fainting or loss of consciousness) was reported, this is referred to as syncope.

Q38

A 35-year-old male has experienced hoarseness for more than four months. He has found it increasingly difficult and painful to swallow. In the past week, he began having breathing difficulties (dyspnea). About three months ago, he experienced some dizziness, and he fainted during one of these episodes. However, these spells have not occurred for the past two months.

What symptoms might be recorded in the medical record?

---

Answer: Q38

- a. hoarseness
- b. difficulty swallowing (dysphagia)
- c. breathing difficulties (dyspnea)
- d. dizziness, fainting spells (syncope)

There are several conditions considered precursors of cancer of the skin--for example, burn scars, chronic skin ulcers, or inflammatory lesions that do not seem to heal. Such conditions are considered signs or symptoms of possible skin cancer and, therefore, are examined periodically.

Perhaps you have heard of instances where a wart or a mole became cancerous. The moles to be watched carefully are the dark brown or blue-black moles, slightly raised from the skin. These are particularly dangerous when they are located so that they are irritated by friction from a collar or belt, or when they are on the feet. Moles or warts that are irritated or show a tendency to change in color or size should be examined immediately by a physician.

Q39

A 58-year-old man noticed the development of dry, scaly patches on the back of his hand. On two or three occasions within the past month, he rubbed off portions of this scaly layer and bleeding occurred. Eventually, this condition was diagnosed as basal cell carcinoma. What is the significant symptom?

---

**Answer: Q39**

**The significant symptom is a scaly patch of skin that bleeds when rubbed.**

Several cancerous conditions are associated with the symptoms of indigestion or difficulty in swallowing. Swallowing difficulties and indigestion are common enough so that a variety of medical terms exist for describing these conditions. These terms include:

nausea (an unpleasant sensation often culminating in vomiting)  
anorexia (lack of appetite)  
dysphagia (difficulty in swallowing)

The term anorexia might be new to you. It can be analyzed as follows:

an--a prefix meaning lack of, without  
orexia--Greek root meaning appetite

Q40

A patient's symptoms include a cough and a vague chest pain; some coughing up of blood. He denies any swallowing problems. Are the following statements about this patient TRUE or FALSE?

- |   |   |                                 |
|---|---|---------------------------------|
| T | F | a. The patient is hemorrhaging. |
| T | F | b. The patient has dysphagia.   |
| T | F | c. The patient has hemoptysis.  |

**Answer: Q40**

- a. False. The patient may be hemorrhaging, but you cannot tell this from the description of the symptoms.**
- b. False. The patient does not have swallowing difficulty.**
- c. True. The patient is coughing up blood.**

Breathing problems are common for certain types of lung and respiratory system malignancies. The terms which refer to various types of breathing difficulties are:

<u>angina pectoris</u> angi(o)--blood vessel pector--relating to chest See pretest on p. 98 for causal definition.	Definition:	A condition characterized by feelings of suffocation and/or spasms of pain in the chest
<u>dyspnea</u> dys--bad, painful, difficult pne(o)--to breathe a--condition of	Definition:	Difficult breathing, painful breathing
<u>orthopnea</u> ortho--upright, straight pne(o)--to breathe a--condition of	Definition:	Inability to breathe except in an upright position

Q41

Match the conditions on the left with the term on the right which best describes that condition:

<u>A person who:</u>	<u>may have:</u>
_____ 1. gets out of breath easily	a. angina pectoris
_____ 2. finds it difficult to swallow	b. anorexia
_____ 3. can't sleep unless sitting upright	c. dysphagia
_____ 4. has fainting spells	d. dyspnea
	e. dysuria
	f. hematuria
	g. melena
	h. orthopnea
	i. pruritus
	j. syncope

Answer: Q41

1. d--dyspnea
2. c--dysphagia
3. h--orthopnea
4. j--syncope

Changes in bladder and bowel habits often are associated with cancers of the urogenital and gastrointestinal systems of the body. Symptoms related to these changes are recorded as:

<u>diarrhea</u> dia-through rrhea--flow, discharge	Definition:	Excessive frequency and looseness of bowel movements
<u>dysuria</u> dys--difficult, painful uria--referring to a characteristic of urine	Definition:	Difficult or painful urination

There are a number of terms used to describe bladder or urinary symptoms. Dysuria (difficult or painful urination) might be described as urinary irritation. Other terms you might encounter in a record include:

1. urinary frequency--continual need to urinate
2. urinary urgency--constant feeling of the need to urinate
3. urinary obstruction--slow stream that seems to be due to an obstruction
4. nocturia--need to urinate frequently during the night

Q42

A variety of diseases, including bladder or prostatic cancer, may produce urinary symptoms. Such difficulties include:

- a. A weak or interrupted flow of urine
- b. The need to urinate often
- c. Inability to or difficulty in urinating
- d. Blood in the urine
- e. Painful or burning urination

Which words define these five symptoms? (A term may be used more than once.)

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

**Answer: Q42**

- a. Urinary obstruction or hesitancy
- b. Urinary frequency
- c. Dysuria
- d. Hematuria
- e. Dysuria

Q43

The term acromegaly refers to an abnormal growth of the extremities. The term is composed of:

acro--a combining form meaning at the extremities  
megal(o) or (mega)--a root word meaning enlargement  
y--a suffix ending meaning characterized by

Acromegalia is a condition caused by hypersecretion of the pituitary growth hormone after maturity and characterized by enlargement of the extremities of the skeleton--the nose, jaws, fingers, and toes.

What do the following terms mean?

- a. Cardiomegaly \_\_\_\_\_
- b. Hepatomegaly \_\_\_\_\_
- c. Splenomegaly \_\_\_\_\_

**Answer:** Q43

- a. **Cardiomegaly**--abnormal enlargement of the heart
- b. **Hepatomegaly**--abnormal enlargement of the liver
- c. **Splenomegaly**--abnormal enlargement of the spleen

Terms that refer to conditions brought about by a change in the function of endocrine glands include:

1. hormonal<sup>1</sup> effect--a general phrase to describe any condition that seems to be the result of changes in endocrine gland<sup>2</sup> functions
2. hirsutism--abnormal hairiness, especially in women

The precocious physical development of prepuberal youngsters is sometimes associated with the development of tumors that change the function of the *endocrine glands*. Also, tumors of the endocrine glands can lead to the condition known as hirsutism (abnormal hairiness, especially in women).

Q44

A 20-year-old, obese female has stopped menstruating (amenorrhea) and has gained 30 pounds during the past six months. Her hair distribution has begun to acquire the characteristics of those of a male. How would you describe these symptoms?

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

---

<sup>1</sup>hormonal--Pertaining to a chemical substance (hormone) produced in one organ and producing a specific regulatory effect in another organ.

<sup>2</sup>endocrine glands--Glands which secrete a hormonal substance into the blood, e.g., adrenal glands, thyroid glands, or pituitary glands.

Answer: Q44

- a. amenorrhea
- b. 30-pound weight gain
- c. hirsutism

Suffixes are added to words to incorporate additional meanings into the word. Some of the suffixes most relevant to the vocabulary of a cancer registrar are listed below. You should read the definition of each term used to illustrate the use of the suffix, but do not memorize them now. You will learn their meanings later in the training program.

1. These suffixes are used to indicate repeat action:

-itate--e.g., irritate:	to stimulate repetitively, to tease
-tate--e.g., agitate:	to move repeatedly, to stir

2. These suffixes are used to indicate the agent which performs the act:

-ist--e.g., anesthetist:	one who administers anesthesia
-ter--e.g., sphincter:	that which constricts

3. These suffixes are used to indicate the surgical procedure done:

-ectomy--e.g., gastrectomy:	excision or removal
-otomy--e.g., duodenotomy:	incision into

This is just a brief introduction to the medical terminology used in diagnostic and operative procedures. You will learn a great deal more about medical terminology in the book on abstracting.

4. There are many suffixes that indicate "the act of" or "the condition resulting from the action." Those you will encounter often are listed and used below.

-ion--e.g., lactation:	secretion of milk by mammary glands
-tus--e.g., diabetes mellitus:	a disease that impairs the ability of the body to use sugar.
-sus--e.g., pulsus:	the result of heating; the pulse
-xus--e.g., plexus:	an interlacing; the result of turning or braiding
-sia--e.g., acro-esthesia:	increased sensitiveness; pain in extremities
-sis--e.g., hemoptysis:	a condition characterized by the splitting up or the coughing up of blood
-tion--e.g., aglutination:	inability to swallow
-ence--e.g., excrescence:	the result of an outgrowth
-itus--e.g., pruritus:	intense itching

The phrase "no general symptoms" sometimes will be described by the term *asymptomatic* (without symptoms). It is possible for a person to be examined for some problem not related to cancer, and the examination will reveal the presence of cancer. Also, cancer might first be diagnosed during a routine physical exam.



## POST-TEST ON COMPLAINTS AND SYMPTOMS

Match each of the terms on the left with one of the definitions listed on the right.

<u>Term</u>	<u>Definition</u>
_____ 1. acromegaly	a. Difficulty in swallowing
_____ 2. angina pectoris	b. Discharge of blood in the urine
_____ 3. anorexia	c. Painful urination
_____ 4. diarrhea	d. Abnormal hairiness, especially in women
_____ 5. dysphagia	e. A diseased condition marked by brief paroxysmal attacks of chest pain caused by deficient oxygenation of heart muscles
_____ 6. dyspnea	f. Itching
_____ 7. dysuria	g. Passage of black, bloody stools
_____ 8. hematemesis	h. Difficulty in breathing
_____ 9. hematuria	i. Abnormal frequency of intestinal discharge
_____ 10. hemoptysis	j. Abnormal enlargement of extremities
_____ 11. hirsutism	k. Spitting up or coughing up of blood
_____ 12. melena	l. Sudden loss of strength, as in fainting
_____ 13. nocturia	m. Inability to breathe except in an upright position
_____ 14. orthopnea	n. Loss of appetite
_____ 15. pruritus	o. The vomiting of blood
_____ 16. syncope	p. Excessive urination at night

## ANSWERS TO POST-TEST

	<u>Term</u>	<u>Definition</u>
<u>i</u>	1. acromegaly	Abnormal enlargement of extremities
<u>e</u>	2. angina pectoris	A disease condition marked by brief paroxysmal attacks of chest pain caused by deficient oxygenation of heart muscles
<u>n</u>	3. anorexia	Loss of appetite
<u>i</u>	4. diarrhea	Abnormal frequency of intestinal discharge
<u>a</u>	5. dysphagia	Difficulty in swallowing
<u>h</u>	6. dyspnea	Difficulty in breathing
<u>c</u>	7. dysuria	Painful urination
<u>o</u>	8. hematemesis	The vomiting of blood
<u>b</u>	9. hematuria	Discharge of blood in the urine
<u>k</u>	10. hemoptysis	Spitting up or coughing up of blood
<u>d</u>	11. hirsutism	Abnormal hairiness, especially in women
<u>g</u>	12. melena	Passage of black, bloody stools
<u>p</u>	13. nocturia	Excessive urination at night
<u>m</u>	14. orthopnea	Inability to breathe except in an upright position
<u>f</u>	15. pruritus	Itching
<u>l</u>	16. syncope	Sudden loss of strength, as in fainting

**SECTION F**

**CANCER REGISTRAR VOCABULARY: PHYSICAL FINDINGS**



## SECTION F

### CANCER REGISTRAR VOCABULARY: PHYSICAL FINDINGS

The next portion of the record contains the *previous medical history* (PMH). This subsection contains information about previous illnesses, accidents, medications, and the presence or absence of allergies.

Following the previous medical history (PMH), you usually find the information about the *family history* (FH) and the *social history* (SH) of the patient. The family history describes the history of cancer and other diseases in the patient's family. The subsection on social history should contain information about smoking, use of alcohol and drugs, birth control pills, and other possible carcinogens. Sometimes this subsection will include work history, especially if the patient has worked in environments that might be conducive to the development of cancer.

The *review of systems* (ROS) comprises the next section of the record. During this review, the physician systematically questions the patient about his well-being, problems associated with head, ears, eyes, nose, throat (HEENT); heart, chest; gastrointestinal (GI) tract, and genitourinary (GU) system problems; unusual bleeding tendencies (hematopoietic problems).

The next portion of the record contains the *physical examination* (PE) of the patient. It begins with a general description of the patient's condition together with a recording of vital signs.

The physical examination begins with the head, eyes, ears, nose, and throat (HEENT) and moves downward, covering such areas as the neck, chest, heart (cardiac), vascular system, lungs, abdomen, genitals, rectum, extremities, and lymph nodes. A general check is then made of the musculoskeletal and nervous systems.

The medical history and physical examination section of a medical record often end with the physician's impression of the diagnosis.

In the following pretest you will find many words which are used to describe physical findings. See how many of them you can match. If you have trouble, use your medical dictionary.

## PRETEST ON PHYSICAL FINDINGS

Following is a pretest for the medical terms that might be found in the physical examination. Match the definitions listed on the right with the medical terms listed on the left.

<u>Term</u>	<u>Definition</u>
___ 1. adenopathy	a. Disease of lymph nodes
___ 2. arterial obstruction	b. Loss of ability that can be associated with some type of dysfunctioning of brain tissue
___ 3. ascites	c. Enlargement of the spleen
___ 4. auscultation	d. Destruction of the liver cells
___ 5. cachexia	e. Loss of a capability that can be associated with a nerve that begins in the spinal column
___ 6. cardiomegaly	f. General physical wasting and malnutrition
___ 7. cranial nerve paralysis	g. Blockage in the arteries
___ 8. dermatitis	h. Presence of fluid in the pleural space
___ 9. edema	i. Paleness, absence of skin coloration
___ 10. hepatolysis	j. Loss of a capability that can be associated with a malfunction of a cranial nerve
___ 11. hepatomegaly	k. Accumulation of serous fluid in the abdominal cavity
___ 12. hypersplenism	l. Disease of glands
___ 13. jaundice	m. Enlargement of the liver
___ 14. lymphadenopathy	n. Blockage in the veins
___ 15. necrosis	
___ 16. pallor	
___ 17. paralysis of brain origin	

Continued on page 131



- \_\_\_\_\_ 18. **percussion**
  - \_\_\_\_\_ 19. **phonocardiography**
  - \_\_\_\_\_ 20. **pleural effusion**
  - \_\_\_\_\_ 21. **spinal cord paralysis**
  - \_\_\_\_\_ 22. **splenomegaly**
  - \_\_\_\_\_ 23. **venous obstruction**
- o. **The act of listening to sounds within the body to determine the condition of the heart, lungs, and other organs**
  - p. **Abnormal accumulation of the serous fluid in connective tissue or serous cavity**
  - q. **Death or decay of cells or tissues in part of the body**
  - r. **Abnormal enlargement of the heart**
  - s. **Inflammation of the skin**
  - t. **Excessive activity of the spleen**
  - u. **Tapping or striking on the body to determine, from sounds produced, the condition of internal organs**
  - v. **Yellowing pigmentation of the skin, tissues, and body fluids caused by deposition of bile pigments**
  - w. **Graphic recording of heart sounds**



## ANSWERS TO PRETEST

	<u>Term</u>	<u>Definition</u>
<u>l</u>	1. adenopathy	Disease of glands
<u>g</u>	2. arterial obstruction	Blockage in the arteries
<u>k</u>	3. ascites	Accumulation of serous fluid in the abdominal cavity
<u>o</u>	4. auscultation	The act of listening to sounds within the body to determine the condition of the heart, lungs, and other organs
<u>f</u>	5. cachexia	General physical wasting and malnutrition
<u>r</u>	6. cardiomegaly	Abnormal enlargement of the heart
<u>j</u>	7. cranial nerve paralysis	Loss of capability that can be associated with a malfunction of a cranial nerve
<u>s</u>	8. dermatitis	Inflammation of the skin
<u>p</u>	9. edema	Abnormal accumulation of serous fluid in connective tissue or serous cavity
<u>d</u>	10. hepatolysis	Destruction of liver cells
<u>m</u>	11. hepatomegaly	Enlargement of the liver
<u>t</u>	12. hypersplenism	Excessive activity of the spleen
<u>v</u>	13. jaundice	Yellowish pigmentation of the skin, tissues, and body fluids caused by deposition of bile pigments
<u>a</u>	14. lymphadenopathy	Disease of the lymph nodes
<u>q</u>	15. necrosis	Death or decay of cells or tissues in part of the body
<u>i</u>	16. pallor	Paleness, absence of skin coloration
<u>b</u>	17. paralysis of brain origin	Loss of ability that can be associated with some type of dysfunctioning of brain tissue
<u>u</u>	18. percussion	Tapping or striking on the body to determine, from sounds produced, the condition of internal organs

Continued on next page

<u>w</u>	19. phonocardiography	Graphic recording of heart sounds
<u>h</u>	20. pleural effusion	Presence of fluid in the pleural space
<u>e</u>	21. spinal cord paralysis	Loss of a capability which can be associated with a nerve that begins in the spinal column
<u>c</u>	22. splenomegaly	Enlargement of the spleen
<u>n</u>	23. venous obstruction	Blockage in the veins

## Physical Findings

The terms ascites, edema, and pleural effusion refer to the abnormal accumulation of fluids in some portions of the body. Their specific definitions are as shown below:

ascites: accumulation of serous fluid in the abdominal cavity

edema: abnormal accumulation of serous fluid in connective tissue or a serous cavity

pleural effusion: the presence of fluid in the pleural space

The serous fluid referred to above is a watery, thin, pale yellow fluid that often looks like serum.

The accumulation of fluid in a body cavity can occur for a variety of reasons. When this condition occurs and when one of the parts located within or adjacent to the cavity becomes cancerous, there is a good probability that some of the cancer cells will detach themselves from their primary location and float in the serous or pleural fluid. Eventually they may attach themselves to some other organ or site bathed by that fluid. This is one of the primary means by which cancer is transferred from one organ or site to the other. It also is one of the main reasons why cancer of a site in or adjacent to the thoracic, abdominal, or pelvic cavity is difficult to manage.

Q45

Abnormal accumulations of fluid may occur in any one of the cavities of the body. These cavities contain the organs of the body. You should be able to answer the true-or-false questions below.

(Circle correct answer.)

- |   |   |    |   |
|---|---|----|---|
| T | F | a. | The condition of ascites could allow a primary cancer of the stomach to metastasize to the liver. |
| T | F | b. | The unusual accumulation of fluid around the muscles of the arm is an example of ascites.         |
| T | F | c. | Pleural effusion in the right pleural cavity will, in all probability, lead to brain metastasis.  |

Answer: Q45

- a. TRUE--Ascites refers to the accumulation of fluid in the abdominal cavity. The liver is located in the abdominal cavity. It is quite possible, therefore, that cancerous cells originating in the stomach can break through the stomach wall, enter the fluid in the abdominal cavity, and eventually attach themselves to some other organ housed within the abdominal cavity.
- b. FALSE--This would be an example of edema, the abnormal accumulation of fluid in connective tissues.
- c. FALSE--The pleural cavity and the cranial cavity are not connected. Therefore, there is no way for fluid that originated in the pleural cavity to enter the cranial cavity.

Brain metastasis is possible, but not by this route.

Q46

In a previous block of instruction, you learned the meaning of the term acromegaly, and you were informed that the suffix megaly was an important one. What is the definition of this suffix?

---

Answer: Q46

The suffix -megaly means enlargement. The term acromegaly is defined as an abnormal enlargement of the extremities.

There are various reasons why organs of the body may become enlarged, and many of these reasons are not related to malignant neoplasms. Nonetheless, when present they will be reported as part of the physical findings. Examples are hepatomegaly and splenomegaly which are often mentioned in cancer patient records.

Q47

Assuming that a patient has the condition known as ascites, could the fluid involved in this condition be associated with the organ referred to in the term hepatomegaly?

YES. NO. (Circle one.)

**Answer: Q47**

**Yes. Ascites is the accumulation of fluid in the abdominal cavity. Hepatomegaly refers to enlargement of the liver; and, the liver is contained within the abdominal cavity.**

For many medical terms the main body of the word indicates the organ or part of the body that is modified by a prefix or a suffix, or both. The combining forms for the words cardiomegaly, hepatomegaly, and splenomegaly are respectively:

cardio (heart)

hepato (liver)

spleno (spleen)

Each of these words is modified by a suffix which is made up of the combining form (mega = large) + a suffix ending (-ly) meaning characterized by.

Q48

Match the three terms listed on the left with the three definitions on the right:

<u>Term</u>	<u>Definition</u>
_____ 1. hypersplenism	a. Destruction of liver cells
_____ 2. phonocardiography	b. Graphic recording of heart sounds
_____ 3. hepatolysis	c. Excessive activity of the spleen

Answer: Q48

1. c--hypersplenism: Hyper- is a prefix meaning excessive, above, overactive.
2. b--phonocardiography: This is a good example of how any number of elements can be combined to form new words.  
  
phon: root word  
o: combining vowel  
cardi: root word  
o: combining vowel  
graph: root word  
y: suffix ending
3. a--hepatolysis: You already have learned that the suffix -lysis means breakdown or destruction of.

An important part of any physical examination includes a thorough visual examination of the patient. During this time, the physician will note whether or not the patient is overweight (obese). In addition, the condition of the skin will be noted. Three terms referring to skin conditions are as follows:

dermatitis--inflammation of the skin

jaundice--yellowish pigmentation of the skin, tissues, and body fluids caused by the deposition of bile pigments

pallor--paleness; absence of skin coloration

A 65-year-old white male was admitted with suspected cancer of the larynx. At the time of admission, he was in good health except for a sore throat. With respect to the physical examination findings, his medical record contained the following information:

Skin:	Clear	
HEENT:	See diagram	(Meaning: Record contained a diagram of the head, eyes, ears, nose, and throat)
Neck:	Without nodes	(Meaning: No palpable lymph nodes)
Chest:	Clear to P and A	(Meaning: Percussion and auscultation revealed no abnormal conditions)
Heart:	NSR without (M), thrill	(Meaning: Normal sinus rhythm (NSR) without murmur (M) or vibratory sensation (thrill))
ABD:	Without palp. organs or masses	(Meaning: By palpation, no enlarged organs, no masses in the abdomen)

Q49

Using the above information, answer the following questions by circling YES or NO.

a. Is there evidence of pallor?

Yes      No

b. The entry "chest: Clear to P and A"

1) rules out pleural effusion.

Yes      No

2) rules out ascites.

Yes      No

c. The physical examination contains information that tells you splenomegaly was not present.

Yes      No

Answer: Q49

- a. No.
- b-1. Yes. The entry "Chest: Clear to P and A" means that the chest was clear to percussion and to auscultation.
- b-2. No. Ascites occurs in the abdominal cavity, not in the chest or pleural cavity.
- c. Yes. The entry "ABD: Without palp. organs or masses" means that the condition of the organs within the abdominal cavity was examined by palpating<sup>1</sup> the patient, and no enlarged organs were found. The spleen is located in the abdominal cavity. Therefore, the record entry tells you that splenomegaly was not present.

---

<sup>1</sup>palpate--To examine by the hand; to feel.

In a previous block of instruction, you learned that the term *anorexia* meant loss or lack of appetite. As you might imagine, if this condition existed for too long, a condition of malnutrition could occur and a general physical wasting of the body might begin. The term cachexia<sup>1</sup> refers to this condition.

The physical examination includes also a determination of whether or not there are any blockages or obstructions noticeable in the circulatory system. (The mechanics of the circulatory system will be discussed in detail in a later manual.) The circulation of the blood involves both arteries and veins throughout the body. Obstructions in the circulatory system may be referred to as arterial obstructions<sup>2</sup> or venous obstructions<sup>3</sup>. Signs of an obstruction of the venous portion of the circulatory system include: dilated or distended veins and/or swelling of the extremities.

An obstruction in the arterial portion of the circulatory system prevents blood from getting to those tissues and cells served by the blocked artery. Thus, the cells and tissues die from lack of oxygen and food. This brings about a condition known as necrosis<sup>4</sup>. You may encounter the term necrosis quite often. Burns or severe injuries also can bring about necrosis. This is a derivation of the word "necropsy."

Q50

a. You previously learned the definition of the term hematuria. What is the relationship between this term and the condition known as venous obstruction?

[x]

- [ ] 1. They are essentially the same condition.
- [ ] 2. They are essentially opposite conditions.
- [ ] 3. They are neither the same nor opposite.

b. A patient was found to have a digestive system disorder resulting in the body's not being able to obtain nutritional value from ordinary food. If this condition existed for too long a time, it could lead to a condition known as \_\_\_\_\_.

---

<sup>1</sup>cachexia--General physical wasting and malnutrition.

<sup>2</sup>arterial obstruction--Blockage or obstruction in the arteries.

<sup>3</sup>venous obstruction--Blockage or obstruction in the veins.

<sup>4</sup>necrosis--Death or decay of cells or tissues in a part of the body.

Answer: Q50

- a. 3--neither the same nor opposite. Hematuria refers to blood in the urine. Venous obstruction refers to a blockage in a vein.
- b. Cachexia--general physical wasting and malnutrition

As part of a physical examination, the examining physician notes the ability of the patient to move his or her limbs, the ability to feel, and the ability to speak, remember, see, and hear in a normal fashion. The absence or malfunction of these abilities can be associated with nervous or neurological disorders. Loss of the ability to move parts of the body or to receive sensations will be noted. In many of these instances the record will state that there seems to be some type of paralysis associated with the cranial nerves, the spinal nerves, or some condition of the brain tissues. Terms used to describe these conditions are as follows:

- cranial nerve paralysis-- Loss of a physical capability associated with a malfunction of a cranial nerve
- paralysis of brain origin-- Loss of a physical ability associated with some type of dysfunctioning of brain tissue
- spinal cord paralysis-- Loss of a function associated with a nerve in the spinal column.

You will not be expected to judge when a particular type of paralysis or loss of normal function is associated with a particular nerve or portion of the brain. In some instances, the record will contain enough specific information to tell you that a loss of function is associated with a particular nerve. In other instances, the medical record will say only that a particular type of paralysis exists or that the patient's ability to speak, feel, or remember is impaired.

As cancer progresses, it is not unusual for the lymph nodes around the primary site to become affected. Also, certain types of cancer--Hodgkin's disease, lymphocytic leukemia, and lymphosarcoma--are closely associated with the lymphatic system, especially enlargement of the lymph nodes in the neck and groin and enlargement of the lymphoid tissue of the spleen.

The term lymphadenopathy is used to describe a disease of the lymph nodes:

lymphadenopathy            Definition:    Disease of the lymph nodes

lymphaden(o)--combining form of prefix meaning lymph gland  
pathy--a suffix meaning a disease (path + y:)

Q51

There are many names for lymphomas. You do not have to memorize these names, but you should know how to locate them in your dictionary. Which of the following terms may also be used to describe lymphomas?

- a.      Hodgkin's disease
- b.      Lymphosarcoma
- c.      Reticulum cell sarcoma
- d.      All of the above

Answer: Q51

d. All of the above.

All terms are names for different varieties of lymphomas. This is one of the constant problems faced by a cancer registrar. Many medical terms may be used to describe the same or similar conditions. You cannot learn to recognize all these words, so you must learn to be an expert at using a medical dictionary.

## POST-TEST ON PHYSICAL FINDINGS

Match the definitions listed on the right with the medical terms listed on the left.

<u>Term</u>	<u>Definition</u>
___ 1. edema	a. Inflammation of the skin
___ 2. cranial nerve paralysis	b. Abnormal enlargement of the heart
___ 3. dermatitis	c. Abnormal accumulation of serous fluid in connective tissue or serous cavity
___ 4. necrosis	d. Disease of the lymph nodes
___ 5. phonocardiography	e. Blockage in the veins
___ 6. hepatolysis	f. Yellowish pigmentation of the skin, tissues, and body fluids caused by deposition of bile pigments
___ 7. percussion	g. Enlargement of the liver
___ 8. adenopathy	h. Graphic recording of heart sounds
___ 9. lymphadenopathy	i. The act of listening to sounds within the body to determine the condition of the heart, lungs, and other organs
___ 10. arterial obstruction	j. Destruction of liver cells
___ 11. splenomegaly	k. Death or decay of cells or tissues in part of the body
___ 12. ascites	l. Tapping or striking on the body to determine, from sounds produced, the condition of internal organs
___ 13. pallor	m. Loss of ability that can be associated with some type of dysfunctioning of brain tissue
___ 14. venous obstruction	n. Presence of fluid in the pleural space
___ 15. cachexia	o. Blockage in arteries
___ 16. pleural effusion	p. Disease of the glands
___ 17. auscultation	
___ 18. spinal cord paralysis	

Continued on next page



- \_\_\_\_\_ 19. hypersplenism
- \_\_\_\_\_ 20. paralysis of brain origin
- \_\_\_\_\_ 21. cardiomegaly
- \_\_\_\_\_ 22. hepatomegaly
- \_\_\_\_\_ 23. jaundice
- q. Loss of a capability that can be associated with a nerve which begins in the spinal column
- r. Enlargement of the spleen
- s. General physical wasting and malnutrition
- t. Accumulation of serous fluid in the abdominal cavity
- u. Loss of a capability that can be associated with a malfunction of a cranial nerve
- v. Excessive activity of the spleen
- w. Paleness, absence of skin coloration



## ANSWERS TO POST-TEST

	<u>Term</u>	<u>Definition</u>
<u>c</u>	1. edema	Abnormal accumulation of serous fluid in connective tissue or serous cavity
<u>u</u>	2. cranial nerve paralysis	Loss of a capability that can be associated with a malfunction of a cranial nerve
<u>a</u>	3. dermatitis	Inflammation of the skin
<u>k</u>	4. necrosis	Death or decay of cells or tissues in part of the body
<u>h</u>	5. phonocardiography	Graphic recording of heart sounds
<u>j</u>	6. hepatolysis	Destruction of liver cells
<u>l</u>	7. percussion	Tapping or striking on the body to determine, from sounds produced, the condition of internal organs
<u>p</u>	8. adenopathy	Disease of the glands
<u>d</u>	9. lymphadenopathy	Disease of the lymph nodes
<u>o</u>	10. arterial obstruction	Blockage in arteries
<u>r</u>	11. splenomegaly	Enlargement of the spleen
<u>t</u>	12. ascites	Accumulation of serous fluid in the abdominal cavity
<u>w</u>	13. pallor	Paleness, absence of skin coloration
<u>e</u>	14. venous obstruction	Blockage in the veins
<u>s</u>	15. cachexia	General physical wasting and malnutrition
<u>n</u>	16. pleural effusion	Presence of fluid in the pleural space
<u>i</u>	17. auscultation	The act of listening to sounds within the body to determine the condition of the heart, lungs, and other organs
<u>q</u>	18. spinal cord paralysis	Loss of a capability that can be associated with a nerve which begins in the spinal column

Continued on next page

<u>v</u>	19.	hypersplenism	Excessive activity of the spleen
<u>m</u>	20.	paralysis of brain origin	Loss of ability that can be associated with some type of dysfunctioning of brain tissue
<u>b</u>	21.	cardiomegaly	Abnormal enlargement of the heart
<u>g</u>	22.	hepatomegaly	Enlargement of the liver
<u>f</u>	23.	jaundice	Yellowish pigmentation of the skin, tissues, and body fluids caused by deposition of bile pigments

**SECTION G**  
**CANCER REGISTRAR VOCABULARY: ILLNESSES**



## **SECTION G**

### **CANCER REGISTRAR VOCABULARY: ILLNESSES**

In this next block of instruction you will learn the definitions of the terms used to describe illnesses. There are, of course, literally hundred of names that could be listed in this section. Those names listed are for illnesses that seem to occur with some frequency in persons who have developed cancer.

Information about present and very recent illnesses should be contained in the medical history section of the medical record--in particular, the section on present illness. The physical examination (PE) section may contain additional information.

To begin this section, please take the pretest on the next page. This test will identify for you those terms you already understand and those terms which will merit your special attention.



## PRE-TEST ON PHYSICAL FINDINGS

Match the definitions listed on the right with the medical terms listed on the left.

<u>Term</u>	<u>Definition</u>
_____ 1. allergy	a. Venereal disease characterized by inflammation of the genital mucous membrane
_____ 2. bronchiectasis	b. Pelvic inflammatory disease
_____ 3. bronchitis	c. Exaggerated or withdrawn behavior
_____ 4. cirrhosis	d. Inflammation of the bronchial tubes
_____ 5. C.V.A.	e. High blood pressure
_____ 6. diabetes mellitus	f. A metabolic disorder
_____ 7. emphysema	g. A broken bone
_____ 8. gonorrhea	h. Costovertebral angle or cerebral vascular accident (or stroke)
_____ 9. hypertension	i. Malfunctioning of the nervous system
_____ 10. infection at tumor site	j. Coagulation necrosis in muscular tissue of the heart
_____ 11. mental illness	k. Chronic dilatation of the bronchi
_____ 12. myasthenia gravis	l. A state of hypersensitivity
_____ 13. myocardial infarct	m. A liver disease
_____ 14. nephritis	n. Any type of invasion of tissue by microorganisms at or around the tumor site
_____ 15. neuritis	o. A chronic shortness of breath
_____ 16. neurologic disorder	p. Inflammation of the lungs
_____ 17. P.I.D.	q. Inflammation of a nerve
_____ 18. pneumonia	r. A venereal disease which can affect all tissues of the body
_____ 19. syphilis	s. A syndrome of fatigue and exhaustion of the muscular system
_____ 20. traumatic fracture	t. Inflammation of the kidney

## ANSWERS TO PRE-TEST

	<u>Term</u>	<u>Definition</u>
<u>l</u>	1. allergy	A state of hypersensitivity
<u>k</u>	2. bronchiectasis	Chronic dilatation of the bronchi
<u>d</u>	3. bronchitis	Inflammation of the bronchial tubes
<u>m</u>	4. cirrhosis	A liver disease
<u>h</u>	5. C.V.A.	Costovertebral angle or cerebral vascular accident (or stroke)
<u>f</u>	6. diabetes mellitus	A metabolic disorder
<u>o</u>	7. emphysema	Chronic shortness of breath
<u>a</u>	8. gonorrhoea	Venereal disease characterized by inflammation of the genital mucous membrane
<u>e</u>	9. hypertension	High blood pressure
<u>n</u>	10. Infection at tumor site	Any type of invasion of tissues by microorganisms at or around tumor site
<u>c</u>	11. mental illness	Exaggerated or withdrawn behavior
<u>s</u>	12. myasthenia gravis	A syndrome of fatigue and exhaustion of the muscular system
<u>j</u>	13. myocardial infarct	Coagulation necrosis in muscular tissue of the heart
<u>t</u>	14. nephritis	Inflammation of the kidney
<u>q</u>	15. neuritis	Inflammation of a nerve
<u>i</u>	16. neurologic disorder	Malfunctioning of the nervous system
<u>b</u>	17. P.I.D.	Pelvic inflammatory disease
<u>p</u>	18. pneumonia	Inflammation of the lungs
<u>r</u>	19. syphilis	Venereal disease which can affect all tissues of the body
<u>g</u>	20. traumatic fracture	A broken bone

Following are names for six illnesses associated with the respiratory system:

<u>Term</u>	<u>Definition</u>
allergy	A state of hypersensitivity to certain things, such as pollen, food, animals, etc., usually characterized by difficult respiration, skin rashes, etc.
bronchiectasis	A chronic dilatation of the bronchi marked by fetid breath and paroxysmal coughing with the expectoration of mucopurulent matter
emphysema	A swelling or inflation of the lung(s) due to the presence of trapped air. Condition makes for chronic shortness of breath
pneumonia	Inflammation of the lungs
tuberculosis	A highly variable communicable disease caused by tubercle bacilli and characterized by toxic symptoms or allergic manifestations which in man primarily affect the lungs
atelectasis	Collapse of the adult lung, or, the incomplete expansion of the lungs at birth

Q52

1. You have already studied the suffix -ectasis. The meaning of this suffix is:

[x]

- [ ] a. dilatation of
- [ ] b. contraction of
- [ ] c. neither

2. List two sources within a medical record where information about present or recent illnesses might be found.

a. \_\_\_\_\_

b. \_\_\_\_\_

**Answer: Q52**

1. a--dilatation of
2. The medical history and physical examination sections of the medical record should contain information about present illnesses. Other possible sources of information are patient referral letters, the discharge summary, and the operative report.

Q53

A medical record noted the presence of a severe asthmatic attack one week prior to admission. Would this most likely be due to allergy, bronchiectasis, emphysema, or another condition (specify)?

---

(fill in)

Answer: Q53

Asthma is an allergy, a state of hypersensitivity to certain things such as pollen, food, animals, and so forth.

On many charts the common or technical name will be used to describe the illness, and you will have no difficulty recognizing it; on the medical records the description of the illness will be similar to that of the dictionary definition. For these medical records you should have little difficulty. There will be still other medical records where the description is not complete enough to say with assurance that the description is that of a particular illness.

Q54

Recently the patient began to suffer pain and swelling in both knees with loss of mobility. Blood analysis revealed an excess of uric acid in the blood. Select the item which describes this condition.

[x]

[ ] a. Infarction at tumor site

[ ] b. Neuritis

[ ] c. Pelvic infection

[ ] d. None of these

Answer: Q54

d--None of these

Neither infection nor inflammation (neuritis) is accompanied by an excess of uric acid and swelling of both knees. These may be symptoms of gout.

Q55

Recently a male patient began to spit up blood. Also, he has experienced shortness of breath and, in general, has been having difficulty breathing. A physical examination of the lungs revealed obstruction in the passage of air. The patient's breath was fetid (bad smelling, stinking), and he admitted to severe coughing spells in recent days.

This paragraph describes:

a. bronchiectasis

b. emphysema

c. pneumonia

d. other

e. none of these

Answer: Q55

a--bronchiectasis. The description of fetid breath and severe coughing spells fits the definition of bronchiectasis. A patient with emphysema will experience a chronic shortness of breath since he is unable to take a "deep" breath. However, his breath need not be fetid, and he may not experience coughing spells.

When a cancer patient has other concurrent illnesses, these usually will be mentioned in the medical record. Read the following paragraph that describes a patient with lung cancer.

Q56

This is the first admission for this 55-year-old white male. He appears in general good health. For the past two weeks he has experienced dysphagia and occasional hemoptysis. Four days ago he had a severe asthmatic attack relieved only after receiving adrenalin. X-rays show a carcinoma of the bronchus.

What other illnesses does the patient have?

---

Answer: Q56

Allergy. Asthma is an allergy--a state of hypersensitivity (like hay fever) to certain things, such as pollen, food, animals, etc.

Now let's see if you can recognize the meaning of the five terms we have covered so far.

<u>Term</u>	<u>Definition</u>
_____ 1. bronchiectasis	a. Inflammation of the lungs
_____ 2. emphysema	b. Chronic dilatation of the bronchi with fetid breath and coughing spells
_____ 3. pneumonia	c. State of hypersensitivity to certain things
_____ 4. tuberculosis	d. Swelling or inflation of the lung(s) due to presence of trapped air; chronic shortness of breath
_____ 5. allergy	e. Communicable disease caused by tubercle bacilli primarily affecting the lungs

Answer: Q57

	<u>Term</u>	<u>Definition</u>
<u>b</u>	1. bronchiectasis	Chronic dilatation of the bronchi, with fetid breath and coughing spells
<u>d</u>	2. emphysema	Swelling or inflation of the lung(s) due to presence of trapped air; chronic shortness of breath
<u>a</u>	3. pneumonia	Inflammation of the lungs
<u>e</u>	4. tuberculosis	Communicable disease caused by tubercle bacilli primarily affecting the lungs
<u>c</u>	5. allergy	State of hypersensitivity to certain things

The next three terms to be covered are hypertension, myocardial infarct, and peripheral vascular disease. These, of course, are all associated with illnesses of the heart and circulatory system. These three terms with their definitions are as follows:

<u>Term</u>	<u>Definition</u>
hypertension	Another name for high blood pressure
myocardial infarct	The formation of an infarct (an area of coagulation necrosis in a tissue) in the myocardium, as a result of interruption of the blood supply to the area
peripheral vascular disease,	Any disease of the vessels which carry blood or lymph to or from the peripheral regions of the body

You should experience no difficulty determining whether or not a patient had one or more of the above conditions. Hypertension and myocardial infarct undoubtedly will be mentioned quite prominently in some portion of the history section. So, assume that a patient has a chief complaint relating to a bone malignancy. Assume also that the patient had a history of hypertension.

Q58

Where would this condition of hypertension be mentioned in the record?

[x]

[ ] a. Chief complaint section

[ ] b. Previous medical history

[ ] c. Review of systems

[ ] d. Physical examination

Answer: Q58

Alternatives b, c, and d are correct. For most patients who have hypertension, mention of this is made in the previous medical history section, the review of systems section, and/or the physical examination section.

Q59

A 63-year-old male was diagnosed as having carcinoma of the esophagus with metastatic lesions in the lung. The condition had progressed to a point where an x-ray examination showed a chronic dilatation of the bronchi of the lung. In addition, the medical history reported that the patient had suffered a coronary thrombosis within the past month.

How might the above information be described?

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Answer: Q59

Bronchiectasis, which means a chronic dilatation of the bronchi. Myocardial infarct or coronary thrombosis is defined as the formation of a clot in a coronary artery, obstructing the flow of blood and causing infarction of the myocardium.

Q60

Malignant neoplasms can originate in nervous tissue or they can invade nervous tissue by direct extension of the tumor. The result can be a variety of conditions and illnesses directly or indirectly related to the nervous system. The names and definitions for three such conditions follow:

<u>Term</u>	<u>Definition</u>
neuritis	Inflammation of a nerve. The condition is attended by pain and tenderness over the nerves by anesthesia and paresthesia, paralysis, wasting, and disappearance of the reflexes.
neurologic disorder	A disease or malfunctioning of the nervous system which might lead to conditions such as abnormal coordination, gait, memory deficit, etc.
myasthenia gravis	A syndrome of fatigue and exhaustion of the muscular system marked by progressive paralysis of muscles without sensory disturbance or atrophy; occurs especially in muscles of the face, lips, tongue, throat, and neck.

What symptoms or physical findings would you find for myasthenia gravis?

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---

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**Answer:** Q60

**Symptoms:** Weakness or fatigue, fainting spells; weakness, fatigue of muscles; motor weakness

**Physical findings:** Partial paralysis of muscles of face and neck

Several other conditions and diseases occur with some frequency in cancer patients. The terms and definitions are listed below:

<u>Term</u>	<u>Definition</u>
burns in primary site area	Certain types of skin cancer seem to be related to burns. Therefore, it is important to note whether or not the patient was burned in the area around the primary site of a skin cancer.
cystic mastitis (chronic cystic mastitis)	This is a disease of the breast characterized by cyst formation which gives a nodular feel to the organ.
leukoplakia, leukoplasia	It is a disease marked by the development upon a mucous membrane (most commonly of the cheeks, gums, or tongue) of white, thickening patches which sometimes show a tendency to fissure. It is common in smokers and sometimes becomes malignant.
polyposis of GI tract polyposis gastrica polyposis intestinalis	The presence of multiple polyps in the GI tract The presence of multiple polyps on the gastric mucosa A condition in which polyps occur in the intestine and rectum
pernicious anemia	This condition is characterized by the reduced ability to absorb vitamin B12 from the gastrointestinal tract due to a failure of gastric mucosal secretion of intrinsic factor; often associated with gastric cancer.
ulcerative colitis	Chronic ulceration in the colon
villous adenomas of the colon	Colon tumors that seem to be associated with the protrusion of small blood vessels on the mucosa of the large intestine and rectum, giving a velvet-like surface (Look up villous in your dictionary.)



## POST-TEST ON PHYSICAL FINDINGS

Choose the definition on the right which matches the term listed on the left.

	<u>Term</u>	<u>Definition</u>
___	1. allergy	a. Venereal disease characterized by inflammation of the genital mucous membrane
___	2. bronchiectasis	b. Pelvic inflammatory disease
___	3. bronchitis	c. Exaggerated or withdrawn behavior
___	4. cirrhosis	d. Inflammation of the bronchial tubes
___	5. C.V.A.	e. High blood pressure
___	6. diabetes mellitus	f. A metabolic disorder
___	7. emphysema	g. A broken bone
___	8. gonorrhea	h. Costovertebral angle or cerebral vascular accident (or stroke)
___	9. hypertension	i. Malfunctioning of the nervous system
___	10. infection at tumor site	j. Coagulation necrosis in muscular tissue of the heart
___	11. mental illness	k. Chronic dilatation of the bronchi
___	12. myasthenia gravis	l. A state of hypersensitivity
___	13. myocardial infarct	m. A liver disease
___	14. nephritis	n. Tissue invasion by microorganisms
___	15. neuritis	o. A chronic shortness of breath
___	16. neurologic disorder	p. Inflammation of the lungs
___	17. P.I.D.	q. Inflammation of a nerve
___	18. pneumonia	r. A venereal disease which can affect all tissues of the body
___	19. syphilis	s. Muscular fatigue and exhaustion
___	20. traumatic fracture	t. Inflammation of the kidney

## ANSWERS TO POST-TEST

	<u>Term</u>	<u>Definition</u>
<u>l</u>	1. allergy	A state of hypersensitivity to certain things, such as, pollen, food, and animals, usually characterized by difficult respiration, skin rashes, etc.
<u>k</u>	2. bronchiectasis	A chronic dilatation of the bronchi marked by fetid breath and paroxysmal coughing, with the expectoration of mucopurulent matter
<u>d</u>	3. bronchitis	Inflammation of the bronchial tubes
<u>m</u>	4. cirrhosis	A disease of the liver
<u>h</u>	5. C.V.A.	Costovertebral angle or cerebral vascular accident
<u>f</u>	6. diabetes mellitus	A metabolic disorder in which the ability to use carbohydrates is lost, and an increased amount of sugar in the blood and urine occurs
<u>o</u>	7. emphysema	A swelling or inflation of the lungs due to the presence of trapped air. Condition makes for chronic shortness of breath.
<u>a</u>	8. gonorrhoea	A contagious venereal inflammation of the genital mucous membrane, transmitted chiefly by intercourse
<u>e</u>	9. hypertension	High blood pressure
<u>n</u>	10. infection at tumor site	Any type of invasion of tissues at or around the tumor site by microorganisms
<u>c</u>	11. mental illness	Any type of overly exaggerated or withdrawn type of behavior, atypical of the patient and classified as neurotic or psychotic
<u>s</u>	12. myasthenia gravis	A syndrome of fatigue and exhaustion of the muscular system marked by progressive paralysis of muscles without sensory disturbance or atrophy; occurs especially in muscles of the face, lips, tongue, throat and neck

Continued on next page

<u>j</u>	13.	myocardial infarct	The formation of an infarct (an area of coagulation necrosis in a tissue) in the myocardium, as a result of interruption of the blood supply to the area, as in coronary thrombosis
<u>t</u>	14.	nephritis	Inflammation of the kidney
<u>q</u>	15.	neuritis	Inflammation of a nerve. The condition is attended by pain and tenderness over the nerves, by anesthesia and paresthesia, paralysis, wasting, and disappearance of the reflexes.
<u>i</u>	16.	neurologic disorder	A disease of malfunctioning of the nervous system which might lead to any of these symptoms: abnormal coordination, abnormal gait, memory deficit, etc.
<u>b</u>	17.	P.I.D.	Pelvic inflammatory disease
<u>p</u>	18.	pneumonia	Inflammation of the lungs
<u>r</u>	19.	syphilis	A contagious venereal disease leading to many structural cutaneous lesions. It can extend to the skin, mucosa, and to nearly all the tissues of the body, even to the bones and periosteum.
<u>g</u>	20.	traumatic fracture	A broken bone



**SECTION H**

**ABBREVIATIONS, SYMBOLS, AND ACRONYMS USED IN MEDICAL RECORDS**



## SECTION H

### ABBREVIATIONS, SYMBOLS, AND ACRONYMS USED IN MEDICAL RECORDS

Medical records can be very difficult to read and comprehend. Often the handwriting is almost illegible, and the widespread use of symbols and abbreviations has reached a point where a handy reference is a necessity. Several such references are listed in the selected bibliography.

You will find that reading a medical record becomes easier as you learn the meaning of the technical terms associated with cancer. Many words that are not clearly written will make sense to you because you will be able to recognize the meaning of the common symbols and abbreviations used in a medical record. These symbols and abbreviations are a useful speedwriting technique for the cancer registrar as well as for the medical staff. However, when there is any possibility of confusion, words should be written out.

The style of abbreviation for a term may vary slightly in different texts. For example, periods may or may not be used between letters; capital or small letters may be used. Remember, you often will have to read the content to understand the meaning of the abbreviation. Variation in use of periods and capitalizations is frequent and widespread (as A.M., AM, a.m., am). Do not use nonstandard abbreviations in abstracts. The current trend is to write abbreviations in capital letters without periods except where understanding or common usage dictates otherwise.

**CAUTION:** The examples listed do not include all the possible meanings for each acronym, abbreviation or symbol, and the abbreviations may not be those used in your hospital. You will have to determine your local usage.



COMMON ABBREVIATIONS

Abbreviation Index

<u>Abbreviation</u>	<u>Term(s)</u>		
A	Allergy		
A	Annum	APP	Appendix
A	Anode	APPROX	Approximately
A	Anterior	ARC	Aids related complex
A	Aortic	ARD(S)	Acute respiratory disease (syndrome)
A	Artery	ART	Artery(ial)
A	Axial	AS	Aortic stenosis
AB	Abort (miscarry)	AS	Arteriosclerosis
AB	About	ASCVD	Arteriosclerotic cardiovascular disease
AB	Antibody	ASHD	Arteriosclerotic heart disease
AB	Asthmatic bronchitis	ASP	Aspiration
ABD, ABDOM	Abdomen	ASR	Aldosterone secretion rate
ABN	Abnormal	ASS	Anterior superior spine (of ilium)
ABP	Arterial blood pressure	A STEN	Aortic stenosis
ABST	Abstract	ATP	Adenosine triphosphate
AC	Adrenal cortex	ATR	Achilles tendon reflex
AC	Air contrast	ATR	Atrophy
AC	Anterior chamber	AU	Angstrom unit
ACH	Adrenal cortical hormone	AU	Aurum (gold, chemical symbol for)
ACID PHOS	Acid phosphatase	AUT	Autopsy
ACID P'TASE	Acid phosphatase	AV	Aortic valve
ACTH	Adrenocorticotrophic hormone	AV	Arteriovenous
ADENOCA	Adenocarcinoma	AV	Atrioventricular
ADH	Antidiuretic hormone (vasopressin)	AV	Average
ADJ	Adjacent	A & W	Alive and well
ADM	Admission	AX	Axilla(ry)
ADM	Admit	AX	Axis(ial)
AFF	Afferent		
AFF	Affirmative	B	Bacillus
AFP	Alpha-fetoprotein	B	Black
AG	Atrial gallop	B	Blue
AG	Antigen	B	Born
AG	Argentum (silver, chemical symbol for)	B	Brother
AGL	Acute granulocytic leukemia	BA	Bachelor of Arts
A/G RATIO	Albumin-globulin ratio	BA	Barium (chemical symbol for)
AGNO <sub>3</sub>	Silver nitrate	BA	Bronchial asthma
AIDS	Acquired immunodeficiency syndrome	BAS	Basal
AK(A)	Above knee (amputation)	BASOS	Basophil(s) (granular leukocyte)
AKA	Also known as	BBB	Blood-brain barrier
ALB	Albumin	BBB	Bundle-branch block
ALK PHOS	Alkaline phosphatase	BBT	Basal body temperature
ALL	Acute lymphocytic leukemia	BC	Birth control
AMA	Against medical advice	BC	Bone conduction
AMB	Ambulatory	BC	Buccocervical
AML	Acute myelogenous leukemia	BCC	Basal cell carcinoma
AMP	Amputation	B-CELLS	Special lymphocytes formed in bone marrow (derived from bursa of Fabricius)
ANAP	Anaplastic		
ANAT	Anatomy	BCG	Bacillus Calmette-Guerin
ANES(TH)	Anesthesia, anesthetic	BD	Bile duct
ANT	Anterior	BE	Barium enema
ANTE	Before	B/F	Black female
A&P	Auscultation & percussion	BIL	Bilateral
AP	Abdominal perineal	BK(A)	Below knee (amputation)
AP	Anteroposterior	BM	Bone marrow
AP	Anterior pituitary	BM	Bowel movement
AP&LAT	Anteroposterior and lateral	B/M	Black male
		BMR	Basal metabolism rate

BP	Blood pressure	DIS, DISCH	Disease; Discharge
BPH	Benign prostatic hypertrophy/hyperplasia	DNA	Deoxyribonucleic acid
BRM	Biological response modifier	DO	Doctor of Osteopathy
BSC	Bone scan	DOA	Dead on arrival
BSO	Bilateral salpingo-oophorectomy	DOB	Date of birth
BT	Brain tumor	DOD	Date of death
BUN	Blood urea nitrogen	DOE	Dyspnea on exertion
BUS	Bartholin's, uethral & Skene's glands	DR	(Medical) doctor
BX	Biopsy	DS	Discharge
		DTR	Deep tendon reflex
		DX	Diagnosis
C	Centigrade		
Ca	Ca--Journal of the American Cancer Society		
C1-C7	Cervical vertebrae	ECF	Extended care facility
CA	Calcium	ECG, EKG	Electrocardiogram
CA	Carcinoma	EEG	Electroencephalogram
CAT	See CT SN	EENT	Eyes, ears, nose & throat
CBC	Complete blood count	EGD	Esophagogastroduodenoscopy
CBD	Common bile duct	EMG	Electromyogram
CC	Chief complaint	ENL	Enlarged
CC	Cubic centimeter	ENT	Ears, nose & throat
CCU	Coronary care unit	EPA	Erect (standing), posterior, anterior
CEA	Carcinoembryonic antigen	ER	Emergency room
CGL	Chronic granulocytic leukemia	ER(A)	Estrogen receptor (assay)
CHF	Congestive heart failure	ERCP	Endoscopic retrograde cholangiopancreatography
CHR	Chronic	EST	Electroshock therapy
CIG	Cigarettes	EUA	Exam under anesthesia
CIN	Cervical intraepithelial neoplasia	EXAM	Examination
CIS	Carcinoma-in situ	EXC	Excision
CLL	Chronic lymphocytic leukemia	EXP LAP	Exploratory laparotomy
CM	Centimeter	EXT	Extend, extension
CM	Costal margin	EXT	External; Extremity
CML	Chronic myeloid/myelocytic leukemia	F	Fahrenheit
CMV	Cytomegalovirus	FB	Fingerbreadth
CNS	Central nervous system	FBS	Fasting blood sugar
C/O	Complaining of	F(M)H	Family (medical) history
CO <sub>2</sub>	Carbon dioxide	FLURO	Fluoroscopy
Co60	Cobalt 60	FOM	Floor of mouth
COR	Heart	FP	Flat plate
CS	Cesium	FU	Follow up
CSF	Cerebrospinal fluid	FUO	Fever unknown origin
CSF	Colony-stimulating factor	FX	Fracture
C-SPINE	Cervical spine	FX	Frozen section
CTR	Certified Tumor Registrar		
CT SC	Computerized (axial) tomography scan	GA	Gastric analysis
CVA	Cerebrovascular accident	GB	Gallbladder
CVA	Costovertebral angle	GE	Gastroenterostomy
C/W	Consistent with	GE	Gastroesophageal
CX	Cervix	GEN	Generalized
CXR	Chest x-ray	GI	Gastrointestinal
CYSTO	Cystoscopy	GM	Gram
CYTO	Cytology	GP	General practitioner
		GR	Grade, grain(s)
D <sub>1</sub> , D <sub>2</sub> , ETC	First dorsal vertebra, second, etc.	GU	Genitourinary
D&C	Dilatation and curettage	GYN	Gynecology
DC	Discharge		
DC	Discontinued	HB	Hemoglobin
DERM	Dermatology	HCG	Human chorionic gonadotropin
DD	Discharge diagnosis	HCT	Hematocrit
DIAM	Diameter	HCVD	Hypertensive cardiovascular disease
DIFF	Differentiated, differential	HD	Heart disease

HEENT	Head, eyes, ears, nose & throat	LE	Lower extremity; Lupus erythematosus
HGB	Hemoglobin	LFT	Liver function test
HIV	Human immunodeficiency virus	LG	Large
HN <sub>2</sub>	Nitrogen mustard	LIF	Left iliac fossa
H <sub>2</sub> O	Water	LINAC	Linear accelerator
H/O	History of	LIQ	Lower inner quadrant (breast)
HORM	Hormone	LKS(B)	Liver, kidney, spleen, (bladder)
HOSP	Hospital	LLE	Left lower extremity
H&P	History and physical	LLL	Left lower lobe (lung)
HPF	High power field	LLQ	Left lower quadrant (abdomen)
HPI	History of present illness	LMD	Local medical doctor
HPV	Human papilloma virus	LMP	Last menstrual period
HR(S)	Hour(s)	LN(S)	Lymph node(s)
HTLV-III	Human T-lymphotrophic virus type III	LOP	Lower outer quadrant (breast)
HVD	Hypertensive vascular disease	LP	Lumbar puncture
HX	History	LPF	Low power field
HYST	Hysterectomy	LPN	Licensed practical nurse
		LS	Lumbosacral
I	Iodine	LSK, LKS	Liver, spleen, kidneys
ICD-O-1	International Classification of Diseases for Oncology, 1st Ed., 1976	LSO	Left salpingo-oophorectomy
ICD-O-2	International Classification of Diseases for Oncology, 2nd Ed., 1992	L-SPINE	Lumbar spine
ICM	Intercostal margin	LT	Left
ICS	Intercostal space	LUE	Left upper extremity
ICU	Intensive care unit	LUL	Left upper lobe (lung)
IG	Immunoglobulin	LUQ	Left upper quadrant (abdomen)
IM	Intramuscular	L&W	Living and well
IMA	Internal mammary artery		
IMP	Impression	M	Monocytes, meter
INCL	Includes, including	MAL	Malignant
INF	Inferior	MALIG	Malignant
INF	Infraction	MAND	Mandible
INF	Infusion	MAST	Mastectomy
INFILT	Infiltrating	M-CSF	Macrophage Colony-Stimulating Factor
INJ	Injection	MC	Millicurie
INT MED	Internal medicine	MCH	Mean corpuscular hemoglobin
IP	Inpatient	MCHC	Mean corpuscular hemoglobin count
IPPB	Intermittent positive pressure breathing	MCL	Mid clavicular line
IT	Intrathecal	MCV	Mean corpuscular volume
IV	Intravenous	MD	Medical Doctor
IVC	Inferior vena cava	MD	Moderately differentiated
IVP	Intravenous pyelogram	MET, METS	Metastatic, metastases
		MEV	Million electron volts
JVD	Jugular venous distention	MH	Marital history
		MH	Mental health
K	Potassium	MG	Milligram
KG	Kilogram	MICRO	Microscopic
KJ	Knee jerk	ML	Middle lobe
KK	Knee kick	ML	Milliliter
KUB	Kidneys, ureters, bladder	MM	Millimeter
KV	Kilovolt	MOD	Moderate
		MOD DIFF	Moderately differentiated
L	Left	MRI	Magnetic resonance imaging
L	Liter	MRM	Modified radical mastectomy
L	Lower	MS	Mitral stenosis
L1-L5	Lumbar vertebrae	MS	Multiple sclerosis
LAP	Laparotomy	MSL	Mid sternal line
LAT	Lateral	MX	Microscopic
LAV	Lymphadenopathy-associated virus	MX	Maxilla(ry), maximum
LCM	Left costal margin	NA	Not applicable
LDH	Lactic dehydrogenase	NBS	Normal bowel sounds
		NEC	Not elsewhere classified

NED	No evidence of disease	POD	Postoperative day
NEG or -	Negative	POOR DIFF	Poorly differentiated
NERD	No evidence of recurrent disease	POS or +	Positive
NEURO	Neurology	POSS	Possible
NL	Normal	POST	Posterior
NOS	Not otherwise specified	POST	Postmortem examination
NR	Not recorded	POSTOP	Postoperative(ly)
NR	Not reportable	PPD	Purified protein derivative (Tuberculin skin test)
NSF	No significant findings	PPD	Packs per day
NTP	Normal temperature and pressure	PR(A)	Progesterone receptor (assay)
N&V	Nausea and vomiting	PREOP	Preoperative(ly)
NVD	Neck vein distention	PROB	Probable(ly)
		PT	Patient
OB	Obstetrics	PT	Physiotherapy
OBST	Obstructed (ing, ion)	PTA	Prior to admission
OD	Right eye (oculus dexter)	PUO	Pyrexia of undetermined origin
OH	Occupational history	PULM	Pulmonary
OP	Operation		
OP	Outpatient	Q	Quadrant
OPD	Outpatient clinic; department		
OPHTH	Ophthalmology	R	Roentgen
OR	Operating room	R	Respiration
ORTH	Orthopedics	R	Right
OS	Bone	RA	Radium
OS	Left eye (oculus sinister)	RAD	Radiation
OS	Mouth	RAD	Radiation Absorbed Dose
OS	Opening	RAD	Radical
OSTEO	Osteomyelitis	RAIU	Radioactive iodine (I 131) uptake
OT	Occupational therapy	RBC	Red blood cells
OTO	Otology	RCM	Right Costal Margin
OU	Each eye (oculus uterque)	RCS	Reticulum cell sarcoma
OV	Office visit	REG	Radioencephalogram
OZ	Ounce	RES	Reticuloendothelial system
		RESEC	Resection
P	Pulse	RESPIR	Respiratory
P&A	Percussion and auscultation	RH	Rhesus (monkey) factor in blood
PA	Posteroanterior	RIA	Radioimmunoassay
PA	Pulmonary artery	RIF	Right iliac fossa
PALP	Palpable, palpated, palpation	RIQ	Right inner quadrant (abdomen)
PAP	Papanicolaou smear	RLE	Right lower extremity
PAP	Papillary	RLL	Right lower lobe (lung)
PAR	Post anesthesia room	RLQ	Right lower quadrant
PARA	Number of pregnancies resulting in viable infants	RML	Right middle lobe (lung)
		RN	Registered nurse
PATH	Pathology	RNA	Ribonucleic acid
PCV	Packed cell volume	RO, R/O	Rule out
PD	Poorly differentiated	ROF	Review of outside films
PDR	Physicians' Desk Reference	ROM	Range of motion
PE	Physical examination	ROS	Review of outside slides
PED	Pediatrics	ROS	Review of systems
PEG	Pneumoencephalography	ROQ	Right outer quadrant (abdomen)
PERC	Percutaneous	RSO	Right salpingo-oophorectomy
PET	Positron emission tomography	R-S cells	Reed-Sternberg cells
PH	Past or personal history	RT	Radiation therapy
PI	Present illness	RT	Right
PID	Pelvic inflammatory disease	RUE	Right upper extremity
PLT	Platelets	RUL	Right upper lobe
PM	Post mortem (after death)	RUQ	Right upper quadrant
PMD	Personal (primary) medical doctor	R-V	Rectovaginal
PMH	Past medical history	RX	Treatment
PND	Postnasal drip		
PO, POSTOP	Postoperative(ly)	S1-S5	Sacral vertebra

SARC	Sarcoma	UMB	Navel (umbilicus)
SB	Small bowel	UNDIFF	Undifferentiated
SBE	Subacute bacterial endocarditis	UOQ	Upper outer quadrant (abdomen)
SCC	Squamous cell carcinoma	UR	Urine
SGOT	Serum glutamic oxaloacetic transaminase	URI	Upper respiratory infection
SGPT	Serum glutamic pyruvic transaminase	UROL	Urology
SH	Social history		
SH	Serum hepatitis	VAG	Vagina, Vaginal
SM	Small	VAG HYST	Vaginal hysterectomy
SMA	Sequential multiple analysis (Biochem profile)	VAIN	Vaginal intraepithelial neoplasia
SML	Small	VASC	Vascular
SML BWL	Small bowel	VD	Venereal disease
SNF	Skilled nursing facility	VIN	Vulvar intraepithelial neoplasia
SO	Salpingo-oophorectomy	VS	Vital signs
SOB	Shortness of breath		
SOL	Solution	W/	With
S/P	Status post	WBC	White blood cells
SPEC	Specimen	W/D	Well developed
SP GR	Specific gravity	WD, WELL DIFF	Well differentiated
S-Q, SQ	Subcutaneous	W/F	White female
SQ, SQUAM	Squamous	W/M	White male
SQ CELL CA	Squamous cell carcinoma	WNL	Within normal limits
SR	Sedimentation rate	W/O	Without
S-SPINE	Sacral spine	WT	Weight
STAPH	Staphylococcus	W/U	Work-up
STAT	Immediately (statim)		
STREP	Streptococcus	XR	X-ray
STSG	Split thickness skin graft		
SUB-Q, SUBQ	Subcutaneous	Y/O	Year old
SURG	Surgery, surgical	YR	Year
SVC	Superior vena cava		
SX	Symptoms		
T	Temperature		
T	Thoracic		
TA	Toxin-antitoxin		
T1-T12	Thoracic vertebra		
T&A	Tonsillectomy and adenoidectomy		
TAH	Total abdominal hysterectomy		
TAH-BSO	Total abdominal hysterectomy-bilateral salpingo-oophorectomy		
TB, TBC	Tuberculosis		
TCC	Transitional cell carcinoma		
TD	Tumor dose		
TNM	Tumor, Nodes, Metastasis		
TP	Total protein		
TPR	Temperature, pulse and respiration		
TS	Tumor size		
TSH	Thyroid stimulating hormone		
T-SPINE	Thoracic spine		
TUR	Transurethral resection		
TURB	Transurethral resection - Bladder		
TURP	Transurethral resection - Prostate		
TVH	Total vaginal hysterectomy		
TX	Treatment		
U	Unit		
UCHD	Usual childhood diseases		
UE	Upper extremity		
UGI	Upper gastrointestinal		
UIQ	Upper inner quadrant (breast)		



COMMON ABBREVIATIONS

Definition Index

Abdomen	ABD, ABDOM	Arteriosclerotic cardiovascular disease	ASCVD
Abdominal perineal	AP	Arteriosclerotic heart disease	ASHD
Abnormal	ABN	Arteriovenous	AV
Abort (miscarry)	AB	Artery	A
About	AB	Artery(ial)	ART
Above knee (amputation)	AK(A)	Aspiration	ASP
Abstract	ABST	Asthmatic bronchitis	AB
Achilles tendon reflex	ATR	Atrial gallop	AG
Acid phosphatase	ACID P'TASE	Atrioventricular	AV
Acid phosphatase	ACID PHOS	Atrophy	ATR
Acquired immunodeficiency syndrome	AIDS	Aurum (gold, chemical symbol for)	AU
Acute granulocytic leukemia	AGL	Auscultation & percussion	A&P
Acute lymphocytic leukemia	ALL	Autopsy	AUT
Acute myelogenous leukemia	AML	Average	AV
Acute respiratory disease (syndrome)	ARD(S)	Axial	A
Adenocarcinoma	ADENOCA	Axilla(ry)	AX
Adenosine triphosphate	ATP	Axis(ial)	AX
Adjacent	ADJ		
Admission	ADM	Bachelor of Arts	BA
Admit	ADM	Bacillus	B
Adrenal cortex	AC	Bacillus Calmette-Guerin	BCG
Adrenal cortical hormone	ACH	Barium (chemical symbol for)	BA
Adrenocorticotrophic hormone	ACTH	Barium enema	BE
Afferent	AFF	Bartholin's, Urethral & Skene's glands	BUS
Affirmative	AFF	Basal	BAS
Against medical advice	AMA	Basal body temperature	BBT
Aids related complex	ARC	Basal cell carcinoma	BCC
Air contrast	AC	Basal metabolism rate	BMR
Albumin	ALB	Basophil(s) (granular leukocyte)	BASOS
Albumin-globulin ratio	A/G RATIO	Before	ANTE
Aldosterone secretion rate	ASR	Below knee (amputation)	BK(A)
Alive and well	A & W	Benign prostatic hypertrophy/hyperplasia	BPH
Alkaline phosphatase	ALK PHOS	Bilateral	BIL
Allergy	A	Bilateral salpingo-oophorectomy	BSO
Alpha-fetoprotein	AFP	Bile duct	BD
Also known as	AKA	Biological response modifier	BRM
Ambulatory	AMB	Biopsy	BX
Amputation	AMP	Birth control	BC
Anaplastic	ANAP	Black	B
Anatomy	ANAT	Black female	B/F
Anesthesia, anesthetic	ANES(TH)	Black male	B/M
Angstrom unit	AU	Blood-brain barrier	BBB
Annum	A	Blood pressure	BP
Anode	A	Blood urea nitrogen	BUN
Anterior	ANT	Blue	B
Anterior chamber	AC	Bone	OS
Anterior pituitary	AP	Bone conduction	BC
Anterior superior spine (of ilium)	ASS	Bone marrow	BM
Anteriorposterior	AP	Bone scan	BSC
Anteroposterior and lateral	AP&LAT	Born	B
Antibody	AB	Bowel movement	BM
Antidiuretic hormone (vasopressin)	ADH	Brain tumor	BT
Antigen	AG	Bronchial asthma	BA
Aortic stenosis	AS	Brother	B
Aortic stenosis	A STEN	Buccocervical	BC
Aortic	A	Bundle-branch block	BBB
Aortic valve	AV		
Appendix	APP	Ca--Journal of the American Cancer Society	CA
Approximately	APPROX	Calcium	CA
Argentum (silver, chemical symbol for)	AG	Carbon dioxide	CO2
Arterial blood pressure	ABP	Carcinoembryonic antigen	CEA
Arteriosclerosis	AS	Carcinoma	CA

Carcinoma-in situ	CIS	Enlarged	ENL
Centigrade	C	Erect (standing), posterior, anterior	EPA
Centimeter	CM	Esophagogastroduodenoscopy	EGD
Central nervous system	CNS	Estrogen receptor (assay)	ER(A)
Cerebrospinal fluid	CSF	Examination	EXAM
Cerebrovascular accident	CVA	Examination under anesthesia	EUA
Certified Tumor Registrar	CTR	Excision	EXC
Cervical spine	C-SPINE	Exploratory laparotomy	EXP LAP
Cervical intraepithelial neoplasia	CIN	Extend, extension	EXT
Cervical vertebrae	C1-C7	Extended care facility	ECF
Cervix	CX	External	EXT
Cesium	CS	Extremity	EXT
Chemotherapy	CHEMO	Eyes, ears, nose & throat	EENT
Chest x-ray	CXR		
Chief complaint	CC	Fahrenheit	F
Chronic myeloid/myelocytic leukemia	CML	Family (medical) history	F(M)H
Chronic	CHR	Fasting blood sugar	FBS
Chronic granulocytic leukemia	CGL	Fever unknown origin	FUO
Chronic lymphocytic leukemia	CLL	Fingerbreadth	FB
Cigarettes	CIG	First dorsal vertebra, second dorsal vertebra, etc.	D <sub>1</sub> , D <sub>2</sub> , etc.
Cobalt 60	Co60		
Colony-stimulating factor	CSF	Flat plate	FP
Common bile duct	CBD	Floor of mouth	FOM
Complaining of	C/O	Fluoroscopy	FLURO
Complete blood count	CBC	Follow up	FU
Computerized (axial) tomography scan	CT SC	Fracture	FX
Congestive heart failure	CHF	Frozen section	FS
Consistent with	C/W		
Coronary care unit	CCU	Gallbladder	GB
Costal margin	CM	Gastric analysis	GA
Costovertebral angle	CVA	Gastroenterostomy	GE
Cubic centimeter	CC	Gastroesophageal	GE
Cystoscopy	CYSTO	Gastrointestinal	GI
Cytology	CYTO	Generalized	GEN
Cytomegalovirus	CMV	General practitioner	GP
Genitourinary	GU	Genitourinary	GU
Date of birth	DOB	Grade, grain(s)	GR
Date of death	DOD	Gram	GM
Dead on arrival	DOA	Gynecology	GYN
Deep tendon reflex	DTR		
Deoxyribonucleic acid	DNA	Head, eyes, ears, nose & throat	HEENT
Dermatology	DERM	Heart	COR
Diagnosis	DX	Heart disease	HD
Diameter	DIAM	Hematocrit	HCT
Differentiated, differential	DIFF	Hemoglobin	HB, HGB
Dilatation and curettage	D&C	High power field	HPF
Discharge	DIS, DISCH	History	HX
Discharge	DC, DS	History and physical	H&P
Discharge diagnosis	DD	History of	H/O
Discontinued	DC	History of present illness	HPI
Disease	DIS	Hormone	HOR
Doctor of Osteopathy	DO	Hospital	HOSPM
Dyspnea on exertion	DOE	Hour(s)	HR(S)
		Human chorionic gonadotropin	HCG)
		Human papilloma virus	HPV
Each eye (oculus uterque)	OU	Human immunodeficiency virus	HIV
Ears, nose & throat	ENT	Human T-lymphotrophic virus type III	HTL
Electrocardiogram	ECG, EKG	Hypertensive cardiovascular disease	HCVV-III
Electroencephalogram	EEG	Hypertensive vascular disease	HVDD
Electromyogram	EMG	Hysterectomy	HYST
Electroshock therapy	EST		
Emergency room	ER		
Endoscopic retrograde cholangiopancreatography	ERCP	Immediately (statim)	STAT
		Immunoglobulin	IG

Impression	IMP	Lumbar spine	L-SPINE
Includes, including	INCL	Lumbar vertebrae	L1-L5
Inferior	INF	Lumbosacral	LS
Inferior vena cava	IVC	Lupus erythematosus	LE
Infiltrating	INFILT	Lymph node(s)	LN(S)
Infraction	INF	Lymphadenopathy associated virus	LAV
Infusion	INF		
Injection	INJ		
Inpatient	IP	Macrophage Colony-Stimulating Factor	M-CSF
Intensive care unit	ICU	Magnetic resonance imaging	MRI
Intercostal margin	ICM	Malignant	MAL, MALIG
Intercostal space	ICS	Mandible	MAND
Intermittent positive pressure breathing	IPPB	Marital history	MH
Internal mammary artery	IMA	Mastectomy	MAST
Internal medicine	INT MED	Maxilla(ry), maximum	MX
International Classification of Diseases for Oncology, 1st Ed., 1976	ICD-O-1	Mean corpuscular hemoglobin	MCH
International Classification of Diseases for Oncology, 2nd Ed., 1992	ICD-O-2	Mean corpuscular volume	MCV
Intramuscular	IM	Mean corpuscular hemoglobin count	MCHC
Intrathecal	IT	Medical Doctor	MD
Intravenous	IV	Mental health	MH
Intravenous pyelogram	IVP	Metastatic, metastases	MET, METS
Iodine	I	Microscopic	MX
		Microscopic	MICRO
Jugular venous distention	JVD	Mid clavicular line	MCL
		Mid sternal line	MSL
Kidneys, ureters, bladder	KUB	Middle lobe	ML
Kilogram	KG	Millicurie	MC
Kilovolt	KV	Milligram	MG
Knee kick	KK	Milliliter	ML
Knee jerk	KJ	Millimeter	MM
		Million electron volts	MEV
Lactic dehydrogenase	LDH	Mitral stenosis	MS
Laparotomy	LAP	Moderate	MOD
Large	LG	Moderately differentiated	MD
Last menstrual period	LMP	Moderately differentiated	MOD DIFF
Lateral	LAT	Modified radical mastectomy	MRM
Left	L, LT	Monocytes, meter	M
Left costal margin	LCM	Mouth	OS
Left eye (oculus sinister)	OS	Multiple sclerosis	MS
Left ilial fossa	LIF		
Left lower extremity	LLE	Nausea and vomiting	N&V
Left lower lobe (lung)	LLL	Navel (umbilicus)	UMB
Left lower quadrant (abdomen)	LLQ	Neck vein distention	NVD
Left upper extremity	LUE	Negative	NEG or -
Left upper lobe (lung)	LUL	Neurology	NEURO
Left upper quadrant (abdomen)	LUQ	Nitrogen mustard	HN <sub>2</sub>
Left salpingo-oophorectomy	LSO	No evidence of disease	NED
Licensed practical nurse	LPN	No evidence of recurrent disease	NERD
Linear accelerator	LINAC	No significant findings	NSF
Liter	L	Normal	NL
Liver function test	LFT	Normal bowel sounds	NBS
Liver kidney, spleen (bladder)	LKS(B)	Normal breath sounds	NBS
Liver, spleen, kidneys	LSK, LKS	Normal temperature and pressure	NTP
Living and well	L&W	Not applicable	NA
Local medical doctor	LMD	Not elsewhere classified	NEC
Low power field	LPF	Not otherwise specified	NOS
Lower	L	Not reportable	NR
Lower extremity	LE	Not recorded	NR
Lower inner quadrant (breast)	LIQ	Number of pregnancies resulting in viable infants	PARA
Lower outer quadrant (breast)	LOQ		
Lumbar puncture	LP	Obstetrics	OB
		Obstructed (ing, ion)	OBST
		Occupational history	OH

Occupational therapy	OT	Radioactive iodine (I 131) uptake	RAIU
Office visit	OV	Radioencephalogram	REG
Opening	OS	Radioimmunoassay	RIA
Operating room	OR	Radium	RA
Operation	OP	Range of motion	ROM
Ophthalmology	OPHTH	Rectovaginal	R-V
Orthopedics	ORTH	Red blood cells	RBC
Osteomyelitis	OSTEO	Reed-Sternberg cells	R-S CELLS
Otology	OTO	Registered nurse	RN
Ounce	OZ	Resection	RESEC
Outpatient	OP	Respiration	R
Outpatient clinic	OPD	Respiratory	RESPIR
Outpatient department	OPD	Reticuloendothelial system	RES
		Reticulum cell sarcoma	RCS
Packed cell volume	PCV	Review of systems	ROS
Packs per day	PPD	Review of outside slides	ROS
Palpable, palpated, palpation	PALP	Review of outside films	ROF
Papanicolaou smear	PAP	Rhesus (monkey) factor in blood	RH
Papillary	PAP	Ribonucleic acid	RNA
Past medical history	PMH	Right	RT
Past or personal history	PH	Right costal margin	RCM
Pathology	PATH	Right eye (oculus dexter)	OD
Patient	PT	Right iliac fossa	RIF
Pediatrics	PED	Right inner quadrant (abdomen)	RIQ
Pelvic inflammatory disease	PID	Right lower extremity	RLE
Percussion and auscultation	P&A	Right lower lobe (lung)	RLL
Percutaneous	PERC	Right lower quadrant	RLQ
Personal (primary) medical doctor	PMD	Right middle lobe (lung)	RML
Physical examination	PE	Right outer quadrant (abdomen)	ROQ
Physicians' Desk Reference	PDR	Right salpingo-oophorectomy	RSO
Physiotherapy	PT	Right upper extremity	RUE
Platelets	PLT	Right upper lobe	RUL
Pneumoencephalography	PEG	Roentgen	R
Poorly differentiated	PD	Rule out	RO, R/O
Positive	POS or +		
Positron emission tomography	PET		
Possible	POSS		
Post anesthesia room	PAR	Sacral spine	S-Spine
Post mortem (after death)	PM	Sacral vertebrae	S1-S5
Posterior	POST	Salpingo-oophorectomy	SO
Posteroanterior	PA	Sarcoma	SARC
Postmortem examination	POST	Sedimentation rate	SR
Postnasal drip	PND	Sequential multiple analysis	SMA
Postoperative day	POD	(Biochem profile)	
Postoperative(ly)	PO, POSTOP	Serum glutamic oxaloacetic transaminase	SGOT
Potassium	K	Serum glutamic pyruvic transaminase	SGPT
Preoperative(ly)	PREOP	Serum hepatitis	SH
Present illness	PI	Shortness of breath	SOB
Prior to admission	PTA	Silver nitrate	AGNO <sub>3</sub>
Probable(ly)	PROB	Skilled nursing facility	SNF
Progesterone receptor (assay)	PR(A)	Small	SM, SML
Pulmonary	PULM	Small bowel	SML BWL
Pulmonary artery	PA	Small bowel	SB
Pulse	P	Social history	SH
Purified protein derivative (Tuberculin skin test)	PPD	Solution	SOL
Pyrexia of undetermined origin	PUO	Special lymphocytes formed in bone marrow (derived from bursa of Fabricius)	B-CELLS
		Specific gravity	SP GR
Quadrant	Q	Specimen	SPEC
		Split thickness skin graft	STSG
Radiation	RAD	Squamous	SQ, SQUAM
Radiation absorbed dose	RAD	Squamous cell carcinoma	SCC
Radiation therapy	RT	Squamous cell carcinoma	SQ CELL CA
Radical	RAD		

Staphylococcus	STAPH	Within normal limits	WNL
Status post	S/P	Without	W/O
Streptococcus	STREP	Work-up	W/U
Subacute bacterial endocarditis	SBE		
Subcutaneous	S-Q, SQ	X-ray	XR
Subcutaneous	SUB-Q, SUBQ		
Superior vena cava	SVC	Year	YR
Surgery, surgical	SURG	Year old	Y/O
Symptoms	SX		
Temperature	T		
Temperature, pulse and respiration	TPR		
Thoracic	T		
Thoracic spine	T-SPINE		
Thoracic vertebra	T1-T12		
Thyroid stimulating hormone	TSH		
Tonsillectomy and adenoidectomy	T&A		
Total protein	TP		
Total abdominal hysterectomy	TAH		
Total abdominal hysterectomy- bilateral salpingo-oophorectomy	TAH-BSO		
Total vaginal hysterectomy	TVH		
Toxin-antitoxin	TA		
Transitional cell carcinoma	TCC		
Transurethral resection	TUR		
Transurethral resection - Bladder	TURB		
Transurethral resection - Prostate	TURP		
Treatment	RX, TX		
Tuberculosis	TB, TBC		
Tumor size	TS		
Tumor dose	TD		
Tumor, Nodes, Metastasis	TNM		
Undifferentiated	UNDIFF		
Unit	U		
Upper extremity	UE		
Upper gastrointestinal	UGI		
Upper inner quadrant (breast)	UIQ		
Upper outer quadrant (abdomen)	UOQ		
Upper respiratory infection	URI		
Urine	UR		
Urology	UROLOG		
Usual childhood diseases	UCHD		
Vagina, Vaginal	VAG		
Vaginal hysterectomy	VAG HYST		
Vaginal intraepithelial neoplasia	VAIN		
Vascular	VASC		
Venereal disease	VD		
Vital signs	VS		
Vulvar intraepithelial neoplasia	VIN		
Water	H <sub>2</sub> O		
Weight	WT		
Well developed	W/D		
Well differentiated	WD, WELL DIFF		
White blood cells	WBC		
White female	W/F		
White male	W/M		
With	W/		



## COMMON SYMBOLS

### Symbol Index

<u>Symbol</u>	<u>Term(s)</u>
1°	Primary
2°	Secondary
@	At
/	Comparison (e.g. 6/12 LN for six of 12 lymph nodes)
=	Equals
#	Number (if before a numeral), pounds (if after a numeral)
X	Times
♀	Female
♂	Male
↑	Increased
↓	Decreased
-	Negative
+	Positive
μCi	Microcurie
μ	Microgram
<	Less than
>	Greater than
≤	Less than or equal to
≥	Greater than or equal to
Ā	With
Ā	Without



## ACRONYMS FOR ORGANIZATIONS CONCERNED WITH CANCER

### Acronym

### Organization

#### FEDERAL GOVERNMENT

- NCI** National Cancer Institute: One of the National Institutes of Health in the U. S. Department of Health and Human Services. it was established as a center for cancer research. The NCI has also assumed a leading role in Acquired Immunodeficiency Syndrome (AIDS) research since the disease was first recognized in 1981.
- SEER** Surveillance, Epidemiology, and End Results: SEER collects incidence and follow-up data in nine areas in the United States for the purpose of identifying and monitoring trends in cancer incidence and survival.

#### NATIONAL ORGANIZATIONS

- AACR** American Association of Cancer Research: An organization of comprehensive hospitals and cancer centers with an interest in community activities. Members are concerned about the how and why of cancer program development, the impact of prospective payment, capitation, and competition, and the establishment and maintenance of high standards of quality patient care.
- ACCC** Association of Community Cancer Centers: An organization of comprehensive hospitals and cancer centers with an interest in community activities. Members are concerned about the how and why of cancer program development, the impact of prospective payment, capitation, and competition, and the establishment and maintenance of high standards of quality patient care.
- ACOA** American College of Oncology Administrators: A professional healthcare organization for oncology administrators, managers, and consultants of cancer programs and services. It is a chapter of the American Academy of Medical Administrators (AAMA).
- ACOS** American College of Surgeons: A professional medical association to improve the quality of care for surgical patients by elevating the standards of surgical education and practice.
- ACS** American Cancer Society: A private cancer research organization, which supports, through grants, investigator-initiated projects in established medical and other scientific institutions across the country.
- AHIMA** American Health Information Management Association: A group of credentialed (RRA, ART) professionals who collect and analyze a wide range of health information.

- AJCC**      American Joint Committee on Cancer: Organized in 1959 for the purpose of clinical staging, the AJCC decided to use the TNM system of the UICC to develop its own system of clinical and pathologic staging. Cooperation between 1982-87 has resulted in uniform and identical definitions and stage groupings of cancer for all sites between UICC and AJCC.
- AMA**      American Medical Association: A professional organization of practicing physicians. It also provides coordination and direction for allied health education to establish and maintain appropriate standards of patient care through its accreditation of allied medical education programs.
- ASCO**      American Society of Clinical Oncology: A society of oncologists, primarily medical, for the dissemination and exchange of cancer information.
- ASSO**      American Society of Surgical Oncology: A society of surgical oncologists for dissemination and exchange of cancer information.
- CCOP**      Community Clinical Oncology Program; A cooperative agreement supported program which provides support to community-based oncologists to participate in clinical trials sponsored by the clinical cooperative groups and/or cancer centers.
- COC**      Commission on Cancer of the American College of Surgeons: Representing 28 national professional organizations, the Commission seeks multidisciplinary cooperation in cancer management. It establishes standards for approval of cancer programs, stimulates cancer programs in institutions and communities, develops nationwide patient care evaluation studies of specific organ sites and types of malignancy as well as symposia and postgraduate courses on cancer for physicians.
- JCAHCO**      Joint Commission on Accreditation of Health Care Organizations: (Formerly JCAH (hospital)). Provides standards for accreditation of health care organizations and conducts surveys to determine an organization's degree of compliance as well as provides acceptable ways to bring the organization into compliance.
- NCRA**      National Cancer Registrars Association: A professional non-profit organization to promote the level of knowledge and performance of cancer registrars through educational standards and continuing education as well as to improve and standardize the compiling of cancer registry information.
- NAACCR**      North American Association of Central Cancer Registries: A professional society whose members are from population-based registries, for the most part, interested in the development and application of cancer registration and morbidity survey techniques to studies of defined population groups and to the conduct of cancer control programs.

## WORLDWIDE ORGANIZATIONS

- IACR** International Association of Cancer Registries: A voluntary non-governmental organization established in 1970 to represent the scientific and professional interests of cancer registries interested in the development and application of cancer registration and morbidity survey techniques to studies of well-defined populations.
- IARC** International Agency for Research on Cancer: Established in 1965 within the framework of the World Health Organization (WHO), IARC is dedicated to research on cancer, particularly epidemiology of cancer and study of potential carcinogens in the human environment.
- UICC** International Union Against Cancer (Union Internationale Contre le Cancer): An organization established to monitor cancer throughout the world. It disseminates current knowledge of cancer, its prevention, early detection, diagnosis, treatment, rehabilitation, and continuing care as well as knowledge in basic and clinical cancer research. It was first in the development of the TNM Clinical Staging Classification in the early 1950's, one of its many accomplishments.
- WHO** World Health Organization: A United Nations organization established to monitor world health. It divides the world into seven regions with a headquarters in each region.

## PUBLICATIONS AND ON-LINE DATA BASES

- ACTUR** The Automated Central Tumor Registry System: A Department of Defense automated central tumor registry system established by the Defense Enrollment Eligibility Reporting System (DEERS) for Army, Navy, and Air Force hospitals.
- ICD-O** The International Classification of Diseases for Oncology: The ICD-O, First Edition (1976), (published by WHO) permits coding of all neoplasms by topography, histology (morphology), and behavior. It also provides a separate grading and differentiation code. The ICD-O, Second Edition (1990), went into general use in the United States in 1992.
- MEDLINE** An on-line version of Index Medicus published by the National Library of Medicine (NLM). It contains information (abstracts) about the documents, but not the documents themselves.
- MEDLARS** The MEDLARS system (NLM) is a basic guide to searching the various biomedical databases. It contains more than 20 separate databases, such as, MEDLINE to search for articles in recent journals, CANCERLIT to search for cancer literature, and CHEMLINE to search for chemical compounds.
- GRATEFUL MED** A system for simplifying the process of searching for and retrieving biomedical information on the MFDLARS system.

**PDOQ**

**The Physicians Data Query: An on-line data base which makes state-of-the-art treatment information, directory information, and protocol information available to the medical community. This data base is maintained by the International Cancer Research Data Base Branch, International Cancer Information Center, NIC.**

### **The Automated Cause Coding System**

**TRACER**

**Target recognition of automatically coded entity references--an automated coding program used at the Office of Population, Censuses and Surveys for coding death certificates**

**MICAR**

**Mortality medical indexing, classification, and retrieval--a computer program that takes diagnoses and translates words into code numbers of ICD-9 (CM)**

**ACME**

**Automated classification of medical entities--the computer program used by the National Center for Health Statistics (NCHS) to select the underlying cause of death after the individual diagnoses have been coded**

**TRANSAX**

**Translate the Axis of Classification of the manually assigned codes into a form amenable to person-based analyses of multiple causes of death. This resolves multiple anomalies when coding death certificates in the United States.**

## ACRONYMS FOR STUDY GROUPS

The following study groups are funded privately and by the Clinical Trials Cooperative Group Program of the National Cancer Institute for the purpose of providing the opportunity for cancer research by extramural investigators. The Cooperative Groups have been instrumental in the development of new standards of cancer patient management and in the development of sophisticated clinical investigation techniques:

BCCA	British Columbia Cancer Agency
BTCG	Brain Tumor Cooperative Group
BTSG	Brain Tumor Study Group
CALGA	Cancer and Leukemia Group A
CALGB	Cancer and Leukemia Group B
CCSG	Children's Cancer Study Group
CDEP	Central Clinical Drug Evaluation Program
COG	Central Oncology Group
ECOG	Eastern Cooperative Oncology Group
GITSG	Gastrointestinal Study Group
GOG	Gynecologic Oncology Group
HNCP	Head and Neck Contracts Program
HTSG	Hepatic Tumor Study Group
IAML	Acute Myelocytic Leukemia Intergroup
INTERG	Intergroup (Other)
IRS	Intergroup Rhabdomyosarcoma Study
LCSG	Lung Cancer Study Group
MAOP	Mid-Atlantic Oncology Program
MARCOG	Mid-Atlantic Regional Co-Op Oncology Group
NABMTG	North American Bone Marrow Treatment Group
NBCG	National Bladder Cancer Group
NCCTG	North Central Cancer Treatment Group
NCOG	Northern California Oncology Group
NORCA	Nutrition Oncology Research Cooperative Association
NPCTG	National Prostatic Cancer Treatment Group
NSABP	National Surgery Adjuvant Project for Breast and Bowel Cancers
POA	Piedmont Oncology Association
POG	Pediatric Oncology Group
PVACCG	Pacific VA Cancer Chemotherapy Group
PVSG	Polycythemia Vera Study Group
RTOG	Radiation Therapy Oncology Group
SECSG	Southeastern Cancer Study Group
SWOG	Southwest Oncology Group
TPN	Total Parenteral Nutrition Group
UORG	Uro-Oncology Research Group
VALG	V.A. Lung Group
VASOG	V.A. Surgical Oncology Group
VBCG	V.A. Chemotherapy Group
WCCG	Western Cancer Chemotherapy Group
WCG	Weski Cancer Group
WTSG	Wilms' Tumor Study Group



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## **INDEX**



## INDEX

Combining Words (see also Word Roots), 17, 57, 117, 141, 147

### Medical Terms,

acromegaly, 97, 98, 117, 123, 124, 137, 138  
adenopathy, 129, 132, 147, 149, 153, 191  
adrenal, 13  
allergy, 159-161, 163, 164, 170-172, 181, 182, 189, 195  
amenorrhea, 119, 120  
anesthesia, 10, 12, 29, 30, 46, 120, 177, 183, 189, 190, 192, 195, 196, 198  
angiectasis, 77  
angina pectoris, 97, 98, 113, 123, 124  
anorexia, 97, 98, 101, 102, 111, 113, 123, 124, 145  
antitoxin, 13  
arterial obstruction, 129, 132, 145, 149, 153  
arteriostenosis, 83, 84  
arthritis, 7, 46  
arthrosis, 15  
ascites, 129, 132, 135, 136, 139, 140, 143, 144, 149, 153  
atelectasis, 161  
auscultation, 129, 132, 143, 144, 149, 153, 189, 192, 195, 198  
basal cell carcinoma, 109, 189, 195  
bilateral, 13  
biopsy, 10, 29, 190, 195  
biostatistics, 17  
biped, 16  
bronchiectasis, 74  
bronchitis, 28, 45, 73, 74, 159, 160, 181, 182, 189, 195  
bronchogenic, 45, 46  
broncholithiasis, 85, 86  
bronchostenosis, 74  
burn(s), 109, 115, 145, 179  
cachexia, 129, 132, 145, 146, 149, 153  
carcinoma, 10, 11, 16, 17, 109, 169, 175, 189, 190, 193, 195, 196, 198, 199  
cardiomegaly, 117, 118, 129, 132, 138, 141, 150, 154  
cellulose, 28, 30  
cerebral vascular accident (CVA), 159, 160, 181, 182  
cerebral, 16  
cervical, 15  
cholelithiasis, 85, 86  
chondroma, 17, 18  
cirrhosis, 159, 160, 181, 182  
cranial nerve paralysis, 146, 149  
cuboid, 15  
CVA, 190, 196  
cystadenoma, 17, 18  
cystic mastitis, 179  
cystocele, 67, 68, 75, 76  
cytology, 13, 15

## Medical Terms (continued)

cytopenia, 48, 57, 58  
dermatitis, 15, 129, 132, 142, 149, 153  
diabetes mellitus, 121, 159, 160, 181, 182  
diagnosis, 7, 10, 29, 30, 95, 128, 190, 196, 203  
diarrhea, 60, 97, 98, 115, 123, 124  
dyschezia, 105, 106  
dysentery, 15  
dysphagia, 97, 98, 101, 102, 104, 108, 111, 113, 114, 123, 124, 169  
dysopia, 105, 106  
dyspnea, 97, 98, 107, 108, 113, 114, 123, 124, 190, 196  
dystaxia, 105, 106  
dysuria, 97, 98, 113, 115, 116, 123, 124  
edema, 129, 132, 135, 136, 149, 153  
emphysema, 83, 89, 90, 159-161, 163, 167, 168, 171, 172, 181, 182  
encephalitis, 16  
endocrine glands, 119  
enterocele, 75, 76  
erythroblast, 17  
esophagocele, 75, 76  
etymology, 7  
fluid, serous (see serous fluid)  
gastrocele, 75, 76  
gastrointestinal, 10, 59, 115, 127, 179, 190, 193, 196, 199  
gastrolithiasis, 85, 86  
gingivitis, 13  
glucose, 15  
gonorrhea, 28, 30, 159, 160, 181, 182  
hematemesis, 29, 97-99, 123, 124  
hematology, 10, 19  
hematuria, 27, 79, 97-99, 101, 102, 113, 116, 123, 124, 145, 146  
hemiplegia, 13  
hemolysis, 15, 53  
hemoptysis, 79, 97-100, 111, 121, 123, 124, 169  
hepatolysis, 53, 129, 132, 141, 142, 149, 153  
hepatomegaly, 117, 118, 129, 132, 138-141, 150, 154  
hirsutism, 97, 98, 119, 120, 123, 124  
Hodgkin's disease, 147  
hormonal, 119  
hypersplenism, 129, 132, 141, 142, 150, 154  
hypertension, 159, 160, 172-174, 181, 182  
hypodermic, 13, 15, 16  
hypoglycemia, 16  
infection at tumor site, 159, 160, 181, 182  
intramuscular, 13  
intravenous, 13  
jaundice, 129, 132, 142, 150, 154  
kidney, 13, 85, 86, 159, 160, 181, 183, 191, 197  
leukemia, 15, 16, 51, 147, 189, 190, 195, 196, 204  
lymphocytic, 15, 16, 51, 147, 189, 190, 195, 196, 204

## Medical Terms (continued)

leukocyte, 10, 51, 57, 58, 189, 195  
leukocytolysis, 57, 58  
leukocytopenia, 57, 58  
leukocytosis, 27, 29, 30, 57, 58  
leukopenia, 28, 47, 48, 51, 52  
leukoplakia, 179  
leukoplasia, 179  
leukorrhagia, 57, 58  
lipogenic, 55, 56  
lipoid, 49, 50, 55, 56  
lipoma, 11, 12, 17, 18, 29, 30, 55, 56  
lipomatosis, 55, 56  
liposarcoma, 10  
lymphadenopathy, 129, 132, 147, 149, 153, 191  
lymphocytic leukemia, 147, 189, 190, 195, 196  
lymphoma, 147, 148  
lymphosarcoma, 147  
melena, 97-99, 113, 123, 124  
mental illness, 159, 160, 181, 182  
metroptosis, 89, 90  
moles, 109  
myasthenia gravis, 159, 160, 177, 181, 182  
myocardial infarct, 159, 160, 172, 176, 181, 183  
necrosis, 129, 132, 145, 149, 153, 159, 160, 172, 181, 183  
neoplasm, 3, 11, 12, 16, 21, 22, 138, 177, 203  
nephritis, 159, 160, 181, 183  
nephrolithiasis, 85, 86  
neuritis, 159, 160, 165, 166, 177, 181, 183  
neurologic disorder, 159, 160, 177, 181, 183  
neuron, 37  
nocturia, 97, 98, 115, 123, 124  
oncology, 10, 19, 20, 28, 191, 197, 202-204  
orthopnea, 97, 98, 113, 114, 123, 124  
osteosarcoma, 10, 29  
pallor, 101, 129, 132, 142, 143, 149, 153  
palpate, 192, 198  
paralysis of brain origin, 129, 146  
pelvic inflammatory disease, 159, 160, 181, 183, 192, 198  
percussion  
pericarditis, 16, 172  
pernicious anemia, 179  
pharyngectasis, 77  
pharyngostenosis, 78, 83  
phonocardiography, 130, 133, 141, 142, 149, 153  
pleural effusion, 130, 133, 135, 143, 149, 153  
pneumolithiasis, 85, 86  
pneumonectasis, 83, 84, 89, 90  
pneumonia, 159-161, 167, 171, 172, 181, 183

## Medical Terms (continued)

poliomyelitis, 15, 16  
polyposis, 179  
protocele, 75, 76  
prognosis, 11-16  
protoplasm, 10  
pruritus, 98, 113, 121, 123, 124  
psychology, 19  
reticulum cell sarcoma, 147, 192, 198  
rhinology, 23, 24  
rhinorrhea, 10, 23  
sarcoma, 10, 16, 17, 29, 30, 147, 192, 193, 198  
serous fluid, 129, 132, 135, 149, 150, 153  
spinal cord paralysis, 146, 149, 153  
splenomegaly, 117, 118, 130, 133, 138, 141, 143, 144, 149, 153  
syncope, 97, 98, 107, 108, 113, 114, 123, 124  
syphilis, 159, 160, 181, 183  
thermal, 11  
thoracostenosis, 89, 90  
tonsillitis, 11  
toxicology, 10  
traumatic fracture, 159, 160, 181, 183  
tuberculosis, 161, 171, 172, 193, 199  
ulcerative colitis, 179  
urinalysis, 10-12  
urinary symptoms, 115  
venous obstruction, 130, 133, 145, 146, 149, 153  
villous adenoma, 179

## Prefixes,

A, an, 44, 80, 111  
ad, 13  
an, 44, 111  
anti, 14  
bi, 14, 16  
dia, 60, 115  
dys, 16, 101, 103-105, 113  
en, 16  
hemi, 13  
hyp(o), 16  
hyper, 79, 129, 132, 141, 142, 150, 154, 159  
hypo, 13, 16  
intra, 13, 14  
neo, 16, 21, 22  
peri, 7, 16  
pro, 13, 14  
sys, 115

## Suffixes,

al, 16  
algia, 33, 35-38, 59-62  
asis (See iasis)  
cal, 15, 16  
cele, 65, 66, 75, 78, 81, 82, 91, 92  
ectasis, 65, 66, 74, 77, 83, 84, 87, 91, 92, 161  
ectomy, 120  
emesis, 99  
emia, 11, 16, 65, 66, 79, 81, 82, 91, 92  
ence, 121  
genic, 11, 27, 30, 35, 36, 43, 46, 56, 59, 61, 62  
hem, 9, 10  
hemia, 79  
ia, 16, 99, 101  
(i)asis, 65, 66, 68, 85, 87, 88, 91, 92  
ic, 7, 16  
ion, 121  
ist, 120  
itate, 120  
itis, 7, 15, 16, 24, 27, 30, 35, 36, 61, 62, 65, 66, 68, 81, 82, 87, 91, 92  
itus, 121  
ly, 141  
lysis, 15, 35, 36, 53, 54, 58, 59, 61, 62, 142  
megaly, 137, 138  
mia, 15, 16  
oid, 15, 35, 36, 49, 50, 56, 59, 61, 62  
ology, 15, 19, 24, 27, 30, 35, 36, 61, 62  
oma, 16-18, 25, 26, 35, 36, 56, 61, 62  
ose, 15, 35, 36, 61, 62  
osis, 15, 27, 30, 35-38, 56, 58, 59, 61, 62, 68, 87  
otomy, 120  
pathy, 11, 147  
penia, 11, 35, 36, 47, 48, 58, 59, 61, 62  
plegia, 65, 66, 70, 78, 81, 82, 91, 92  
poiesis, 65, 66, 85, 91, 92  
ptosis, 65, 66, 91, 92  
rrhage, 35, 36, 59, 61, 62  
rrhagia, 42, 58  
rrhea, 25, 26, 35, 36, 59-62, 115  
rrhexia, 71  
rrhexis, 65, 66, 72, 81, 82, 91, 92  
sia, 121  
sis, 15, 16, 99, 121  
stenosis, 65, 66, 74, 78, 83, 84, 87, 91, 92  
sus, 121  
tate, 120  
ter, 120  
tion, 121  
tus, 121  
uria, 115

## Suffixes (continued)

xus, 121  
y, 117, 142

## Word Roots,

(a/an)esthesio, 9, 10, 61, 62  
acr(o), 117, 121  
aden(o), 147  
angi(o), 77  
arteri(o), 84  
arthr(o), 7  
bi(o), 9, 10, 17, 61, 62  
blast, 17  
bronch(o), 7, 46, 73, 83  
carcin(o), 9, 10, 16-18, 61, 62  
cardi(o), 7, 16, 141, 142  
cephal(o), 16  
cerebr(o), 16  
chole(o), 85  
chondr(o), 17,18  
cyst(o), 67, 68  
cyt(o), 14, 47, 53, 54  
derm, 16  
enter(o), 16  
erythr(o), 17, 80  
esophag(o), 75, 76  
esthesi(o), 12  
fibr(o), 49  
film, 17  
function, 16  
gastr(o), 9, 10, 25, 26  
gen, 7  
gingiv(o), 14  
glyc(o), 16  
gno, 9-12, 61, 62  
gon(o), 28, 30  
graph, 142  
halitus, 37  
hem(a), 9, 10, 19, 46, 61, 62, 79, 80, 99  
hemo, 53  
hepat(o), 54, 141  
laryngo(o), 69  
leuk(o), 9, 10, 47, 48, 52, 61, 62  
lip(o), 9, 10, 11, 12, 55, 61, 62  
lymph(o), 147  
mega, 117  
megal(o), 117  
melas, 99

**Word Roots (continued),**

men(o), 42  
metr(o), 39, 40  
micr(o), 17  
my(o), 54  
neur(o), 38, 42, 43  
onc(o), 9, 10, 19, 25, 26, 61, 62  
orexia, 111  
orth(o), 113  
oste(o), 9, 10, 42, 43  
ot(o), 38  
path(o), 11, 12, 42, 43  
ped, 16  
phag(o), 101  
phon, 142  
plasm, 9-12, 16, 21, 22, 27, 30, 61, 62  
pneum(o), 84  
psych(o), 38  
renal, 13  
rhin(o), 9, 10, 23, 61, 62  
sarc(o), 9, 10, 16-18, 25, 26, 61, 62  
splen(o), 141  
statistics, 17  
therm(o), 11  
tonsilla, 11  
toxic(o), 9, 10  
uria, 27, 30  
urin, 9-12  
uro, 9-12