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# SEER Program

# Self Instructional Manual for Cancer Registrars

## Tumor Registrar Vocabulary: The Composition of Medical Terms

## Book Three

Second Edition


NATIONAL INSTITUTES OF HEALTH
National Cancer Institute

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## Tumor Registrar Vocabulary: The Composition of Medical Terms

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
National Institutes of Health

# 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

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# BOOK 3

# CANCER REGISTRAR VOCABULARY: THE COMPOSITION OF MEDICAL TERMS

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

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# 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 | + | card | + | itis |
| (prefix) | | (root) | | (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 | + | o | + | gen | + | ic |
| (root) | | (combining vowel) | | (root) | | (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[1]. At the very least, you should read this section of your dictionary paying special attention to the list of roots, prefixes, and suffixes.

---

[1]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.

| | | Word Root | | Definition |
|---|---|---|---|---|
| _____ | 1. | (an[1])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 |

[1]a or an: A prefix signifying without (lack of) or not.

ANSWERS TO PRETEST

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

[1]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.

| Medical Term | Root | Root Definition |
|---|---|---|
| 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.

| Medical term | Prefix | Prefix Definition |
|---|---|---|
| hemiplegia | hemi- | half |
| hypodermic | hypo- | under |
| intramuscular | intra- | within |

Q2

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

[x]

| | | | |
|---|---|---|---|
| [ ] | antitoxin | [ ] | prognosis |
| [ ] | bilateral | [ ] | intravenous |
| [ ] | cytology | [ ] | gingivitis |

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:

| Medical Term | Suffix | Suffix Definition |
|---|---|---|
| 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:

| Medical Term | Word Element | Meaning |
|---|---|---|
| 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

| Answer | Root/Suffix | Root Definition |
|---|---|---|
| 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. hemat<u>uria</u> _____

   b. osteo<u>genic</u> _____

   c. leukocyt<u>osis</u> _____

   d. cytopath<u>ology</u> _____

   e. mast<u>itis</u> _____

   f. cyto<u>plasm</u> _____

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. hematemesis
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.

| | Word Element | Type of Element |
|---|---|---|
| 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" -- hysterolysis. -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?

| | Suffix | | Definition |
|---|---|---|---|
| _____ 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

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

[x]

[ ] a. neurosis

[ ] b. psychosis

[ ] c. neither term

[ ] d. both terms

2. An earache might be described by the term:

[x]

[ ] 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).

[x]

[ ] 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:

[x]

[ ] 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?

[x]

[ ] 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.

| Term | Definitions |
|---|---|
| ____ 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

| Term | Definition |
|---|---|
| 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.

| | | Term | | Definition |
|---|---|---|---|---|
| _____ | 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

| Term | Definition |
|---|---|
| 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:

[x]

[ ] 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:

[x]

[ ] 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:

| Word Elements | | Definition | |
|---|---|---|---|
| _____ 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

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

| | | Suffixes | | Definition |
|---|---|---|---|---|
| _____ | 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

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

| Term | | | Definition | |
|---|---|---|---|---|
| _____ | 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

| ANSWER | Term | Definition |
|---|---|---|
| d 1. | esophagocele | Esophageal hernia |
| e 2. | gastrocele | Hernia of the stomach |
| a 3. | proctocele | Protrusion of the rectum, for example, into the vagina in females (also known as rectocele) |
| c 4. | enterocele | A hernia containing a loop of intestine |
| b 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 -hemia. 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.

| Suffix | Definition |
|---|---|
| ____ 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

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

You have seen the term bronchiectasis (bronch = bronchial tubes of the lung) + ( -estasis = 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.

| Term | Definition |
|---|---|
| _____ 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

| ANSWER | | Term | Definition |
|---|---|---|---|
| c | 1. | broncholithiasis | Condition in which calculi are formed in the bronchi |
| b | 2. | gastrolithiasis | Presence or formation of calculi or other concretions in the stomach |
| e | 3. | cholelithiasis | A condition associated with the formation of gallstones |
| d | 4. | pneumolithiasis | The presence of concretions in the lungs |
| a | 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.

| | Definition | Term |
|---|---|---|
| _____ | 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

| ANSWER | | Definition | Term |
|---|---|---|---|
| b | 1. | A shrinkage of the stomach | gastrostenosis |
| f | 2. | A prolapse of the uterus | metroptosis |
| e | 3. | Protrusion of a part of the pharynx | pharyngocele |
| d | 4. | Dilatation of the bronchus | bronchiectasis |
| a | 5. | Emphysema of the lung | pneumonectasis |
| c | 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.

| Your Answer | | Suffix | Student's Answer |
|---|---|---|---|
| _____ | 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

| Answer | | Suffix | Correct Answer |
|---|---|---|---|
| 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.

| | Term | Definition |
|---|---|---|
| _____ 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

| | Term | Definition |
|---|---|---|
| e | 1. acromegaly | Abnormal enlargement of extremities |
| j | 2. angina pectoris | A disease condition marked by brief paroxysmal attacks of chest pain caused by deficient oxygenation of heart muscles |
| a | 3. anorexia | Loss of appetite |
| f | 4. diarrhea | An abnormal frequency of intestinal discharge |
| n | 5. dysphagia | Difficulty in swallowing |
| g | 6. dyspnea | Difficulty in breathing |
| l | 7. dysuria | Painful urination |
| o | 8. hematemesis | The vomiting of blood |
| m | 9. hematuria | Discharge of blood in the urine |
| d | 10. hemoptysis | Spitting up or coughing up of blood |
| k | 11. hirsutism | Abnormal hairiness, especially in women |
| h | 12. melena | Passage of black, bloody stools |
| p | 13. nocturia | Excessive urination at night |
| b | 14. orthopnea | Inability to breathe except in an upright position |
| i | 15. pruritus | Itching |
| c | 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<br>hemat--a stem meaning blood<br>ur--a stem referring to urine<br>ia--a suffix meaning condition of | Definition: | Condition of blood in the urine |
| hemoptysis<br>hemo--a stem meaning blood<br>ptysis--stem referring to spitting<br>sis--a suffix referring to condition of | Definition: | A condition characterized by the spitting up or coughing up of blood |
| melena<br>from "melas," a root meaning black | Definition: | The passage of black, tarry stools containing blood. (When blood oxidizes, it becomes black.) |
| hematemesis<br>hemat--a stem meaning blood<br>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:

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

| A person who: | may have: |
|---|---|
| _____ 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:

| | | |
|---|---|---|
| diarrhea<br>dia-through<br>rrhea--flow, discharge | Definition: | Excessive frequency and looseness of bowel movements |
| dysuria<br>dys--difficult, painful<br>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[1] effect--a general phrase to describe any condition that seems to be the result of changes in endocrine gland[2] 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. _____

---

[1]hormonal--Pertaining to a chemical substance (hormone) produced in one organ and producing a specific regulatory effect in another organ.

[2]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., aglutition: | 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.

| | Term | Definition |
|---|---|---|
| _____ 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 | |
| _____ 7. | dysuria | f. Itching |
| _____ 8. | hematemesis | g. Passage of black, bloody stools |
| _____ 9. | hematuria | h. Difficulty in breathing |
| _____ 10. | hemoptysis | i. Abnormal frequency of intestinal discharge |
| _____ 11. | hirsutism | j. Abnormal enlargement of extremities |
| _____ 12. | melena | k. Spitting up or coughing up of blood |
| _____ 13. | nocturia | l. Sudden loss of strength, as in fainting |
| _____ 14. | orthopnea | m. Inability to breathe except in an upright position |
| _____ 15. | pruritus | n. Loss of appetite |
| _____ 16. | syncope | o. The vomiting of blood |
| | | p. Excessive urination at night |

ANSWERS TO POST-TEST

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

| | Term | | Definition |
|---|---|---|---|
| _____ 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

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

Continued on next page

| | | | |
|---|---|---|---|
| w | 19. | phonocardiography | Graphic recording of heart sounds |
| h | 20. | pleural effusion | Presence of fluid in the pleural space |
| e | 21. | spinal cord paralysis | Loss of a capability which can be associated with a nerve that begins in the spinal column |
| c | 22. | splenomegaly | Enlargement of the spleen |
| n | 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:

| | Term | | Definition |
|---|---|---|---|
| _____ | 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[1] 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.

---

[1]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[1] 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[2] or venous obstructions[3]. 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[4]. 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 esentially 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 _____.

---

[1]cachexia--General physical wasting and malnutrition.

[2]arterial obstruction--Blockage or obstruction in the arteries.

[3]venous obstruction--Blockage or obstruction in the veins.

[4]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.

| | Term | | Definition |
|---|---|---|---|
| _____ 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 | q. Loss of a capability that can be associated with a nerve which begins in the spinal column |
| _____20. paralysis of brain origin | r. Enlargement of the spleen |
| _____21. cardiomegaly | s. General physical wasting and malnutrition |
| _____22. hepatomegaly | t. Accumulation of serous fluid in the abdominal cavity |
| _____23. jaundice | 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

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

| | | | |
|---|---|---|---|
| v | 19. | hypersplenism | Excessive activity of the spleen |
| m | 20. | paralysis of brain origin | Loss of ability that can be associated with some type of dysfunctioning of brain tissue |
| b | 21. | cardiomegaly | Abnormal enlargement of the heart |
| g | 22. | hepatomegaly | Enlargement of the liver |
| f | 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.

| Term | Definition |
|---|---|
| _____ 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

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

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

| Term | Definition |
|---|---|
| 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:

[x]

[ ] 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.

Q57

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

| | Term | | Definition |
|---|---|---|---|
| _____ 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

| | Term | Definition |
|---|---|---|
| _b_ | 1. bronchiectasis | Chronic dilatation of the bronchi, with fetid breath and coughing spells |
| _d_ | 2. emphysema | Swelling or inflation of the lung(s) due to presence of trapped air; chronic shortness of breath |
| _a_ | 3. pneumonia | Inflammation of the lungs |
| _e_ | 4. tuberculosis | Communicable disease caused by tubercle bacilli primarily affecting the lungs |
| _c_ | 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:

| Term | Definition |
|---|---|
| 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?

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:

| Term | Definition |
|---|---|
| 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?

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:

| Term | Definition |
|---|---|
| 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<br>polyposis gastrica<br>polyposis intestinalis | The presence of multiple polyps in the GI tract<br>The presence of multiple polyps on the gastric mucosa<br>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.

| | | Term | | Definition |
|---|---|---|---|---|
| ___ | 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

| | | Term | Definition |
|---|---|---|---|
| _l_ | 1. | allergy | A state of hypersensitivity to certain things, such as, pollen, food, and animals, usually characterized by difficult respiration, skin rashes, etc. |
| _k_ | 2. | bronchiectasis | A chronic dilatation of the bronchi marked by fetid breath and paroxysmal coughing, with the expectoration of mucopurulent matter |
| _d_ | 3. | bronchitis | Inflammation of the bronchial tubes |
| _m_ | 4. | cirrhosis | A disease of the liver |
| _h_ | 5. | C.V.A. | Costovertebral angle or cerebral vascular accident |
| _f_ | 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 |
| _o_ | 7. | emphysema | A swelling or inflation of the lungs due to the presence of trapped air. Condition makes for chronic shortness of breath. |
| _a_ | 8. | gonorrhea | A contagious venereal inflammation of the genital mucous membrane, transmitted chiefly by intercourse |
| _e_ | 9. | hypertension | High blood pressure |
| _n_ | 10. | infection at tumor site | Any type of invasion of tissues at or around the tumor site by microorganisms |
| _c_ | 11. | mental illness | Any type of overly exaggerated or withdrawn type of behavior, atypical of the patient and classified as neurotic or psychotic |
| _s_ | 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

| | | | |
|---|---|---|---|
| _j_ | 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 |
| _t_ | 14. | nephritis | Inflammation of the kidney |
| _q_ | 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. |
| _i_ | 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. |
| _b_ | 17. | P.I.D. | Pelvic inflammatory disease |
| _p_ | 18. | pneumonia | Inflammation of the lungs |
| _r_ | 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. |
| _g_ | 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 excerpt 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.

Table of Contents
Manuals

Abbreviation Index

| Abbreviation | Term(s) |
|---|---|
| A | Allergy |
| A | Annum |
| A | Anode |
| A | Anterior |
| A | Aortic |
| A | Artery |
| A | Axial |
| AB | Abort (miscarry) |
| AB | About |
| AB | Antibody |
| AB | Asthmatic bronchitis |
| ABD, ABDOM | Abdomen |
| ABN | Abnormal |
| ABP | Arterial blood pressure |
| ABST | Abstract |
| AC | Adrenal cortex |
| AC | Air contrast |
| AC | Anterior chamber |
| ACH | Adrenal cortical hormone |
| ACID PHOS | Acid phosphatase |
| ACID P'TASE | Acid phosphatase |
| ACTH | Adrenocorticotrophic hormone |
| ADENOCA | Adenocarcinoma |
| ADH | Antidiuretic hormone (vasopressin) |
| ADJ | Adjacent |
| ADM | Admission |
| ADM | Admit |
| AFF | Afferent |
| AFF | Affirmative |
| AFP | Alpha-fetoprotein |
| AG | Atrial gallop |
| AG | Antigen |
| AG | Argentum (silver, chemical symbol for) |
| AGL | Acute granulocytic leukemia |
| A/G RATIO | Albumin-globulin ratio |
| $AGNO_3$ | Silver nitrate |
| AIDS | Acquired immunodeficiency syndrome |
| AK(A) | Above knee (amputation) |
| AKA | Also known as |
| ALB | Albumin |
| ALK PHOS | Alkaline phosphatase |
| ALL | Acute lymphocytic leukemia |
| AMA | Against medical advice |
| AMB | Ambulatory |
| AML | Acute myelogenous leukemia |
| AMP | Amputation |
| ANAP | Anaplastic |
| ANAT | Anatomy |
| ANES(TH) | Anesthesia, anesthetic |
| ANT | Anterior |
| ANTE | Before |
| A&P | Auscultation & percussion |
| AP | Abdominal perineal |
| AP | Anteroposterior |
| AP | Anterior pituitary |
| AP&LAT | Anteroposterior and lateral |
| APP | Appendix |
| APPROX | Approximately |
| ARC | Aids related complex |
| ARD(S) | Acute respiratory disease (syndrome) |
| ART | Artery(ial) |
| AS | Aortic stenosis |
| AS | Arteriosclerosis |
| ASCVD | Arteriosclerotic cardiovascular disease |
| ASHD | Arteriosclerotic heart disease |
| ASP | Aspiration |
| ASR | Aldosterone secretion rate |
| ASS | Anterior superior spine (of ilium) |
| A STEN | Aortic stenosis |
| ATP | Adenosine triphosphate |
| ATR | Achilles tendon reflex |
| ATR | Atrophy |
| AU | Angstrom unit |
| AU | Aurum (gold, chemical symbol for) |
| AUT | Autopsy |
| AV | Aortic valve |
| AV | Arteriovenous |
| AV | Atrioventricular |
| AV | Average |
| A & W | Alive and well |
| AX | Axilla(ry) |
| AX | Axis(ial) |
| B | Bacillus |
| B | Black |
| B | Blue |
| B | Born |
| B | Brother |
| BA | Bachelor of Arts |
| BA | Barium (chemical symbol for) |
| BA | Bronchial asthma |
| BAS | Basal |
| BASOS | Basophil(s) (granular leukocyte) |
| BBB | Blood-brain barrier |
| BBB | Bundle-branch block |
| BBT | Basal body temperature |
| BC | Birth control |
| BC | Bone conduction |
| BC | Buccocervical |
| BCC | Basal cell carcinoma |
| B-CELLS | Special lymphocytes formed in bone marrow (derived from bursa of Fabricius) |
| BCG | Bacillus Calmette-Guerin |
| BD | Bile duct |
| BE | Barium enema |
| B/F | Black female |
| BIL | Bilateral |
| BK(A) | Below knee (amputation) |
| BM | Bone marrow |
| BM | Bowel movement |
| B/M | Black male |
| BMR | Basal metabolism rate |

| | |
|---|---|
| BP | Blood pressure |
| BPH | Benign prostatic hypertrophy/hyperplasia |
| BRM | Biological response modifier |
| BSC | Bone scan |
| BSO | Bilateral salpingo-oophorectomy |
| BT | Brain tumor |
| BUN | Blood urea nitrogen |
| BUS | Bartholin's, uethral & Skene's glands |
| BX | Biopsy |
| | |
| C | Centigrade |
| Ca | Ca--Journal of the American Cancer Society |
| C1-C7 | Cervical vertebrae |
| CA | Calcium |
| CA | Carcinoma |
| CAT | See CT SN |
| CBC | Complete blood count |
| CBD | Common bile duct |
| CC | Chief complaint |
| CC | Cubic centimeter |
| CCU | Coronary care unit |
| CEA | Carcinoembryonic antigen |
| CGL | Chronic granulocytic leukemia |
| CHF | Congestive heart failure |
| CHR | Chronic |
| CIG | Cigarettes |
| CIN | Cervical intraepithelial neoplasia |
| CIS | Carcinoma-in situ |
| CLL | Chronic lymphocytic leukemia |
| CM | Centimeter |
| CM | Costal margin |
| CML | Chronic myeloid/myelocytic leukemia |
| CMV | Cytomegalovirus |
| CNS | Central nervous system |
| C/O | Complaining of |
| $CO_2$ | Carbon dioxide |
| Co60 | Cobalt 60 |
| COR | Heart |
| CS | Cesium |
| CSF | Cerebrospinal fluid |
| CSF | Colony-stimulating factor |
| C-SPINE | Cervical spine |
| CTR | Certified Tumor Registrar |
| CT SC | Computerized (axial) tomography scan |
| CVA | Cerebrovascular accident |
| CVA | Costovertebral angle |
| C/W | Consistent with |
| CX | Cervix |
| CXR | Chest x-ray |
| CYSTO | Cystoscopy |
| CYTO | Cytology |
| | |
| $D_1$, $D_2$, ETC | First dorsal vertebra, second, etc. |
| D&C | Dilatation and curettage |
| DC | Discharge |
| DC | Discontinued |
| DERM | Dermatology |
| DD | Discharge diagnosis |
| DIAM | Diameter |
| DIFF | Differentiated, differential |
| DIS, DISCH | Disease; Discharge |
| DNA | Deoxyribonucleic acid |
| DO | Doctor of Osteopathy |
| DOA | Dead on arrival |
| DOB | Date of birth |
| DOD | Date of death |
| DOE | Dyspnea on exertion |
| DR | (Medical) doctor |
| DS | Discharge |
| DTR | Deep tendon reflex |
| DX | Diagnosis |
| | |
| ECF | Extended care facility |
| ECG, EKG | Electrocardiogram |
| EEG | Electroencephalogram |
| EENT | Eyes, ears, nose & throat |
| EGD | Esophagogastroduodenoscopy |
| EMG | Electromyogram |
| ENL | Enlarged |
| ENT | Ears, nose & throat |
| EPA | Erect (standing), posterior, anterior |
| ER | Emergency room |
| ER(A) | Estrogen receptor (assay) |
| ERCP | Endoscopic retrograde cholangiopancreatography |
| EST | Electroshock therapy |
| EUA | Exam under anesthesia |
| EXAM | Examination |
| EXC | Excision |
| EXP LAP | Exploratory laparotomy |
| EXT | Extend, extension |
| EXT | External; Extremity |
| F | Fahrenheit |
| FB | Fingerbreadth |
| FBS | Fasting blood sugar |
| F(M)H | Family (medical) history |
| FLURO | Fluoroscopy |
| FOM | Floor of mouth |
| FP | Flat plate |
| FU | Follow up |
| FUO | Fever unknown origin |
| FX | Fracture |
| FX | Frozen section |
| | |
| GA | Gastric analysis |
| GB | Gallbladder |
| GE | Gastroenterostomy |
| GE | Gastroesophageal |
| GEN | Generalized |
| GI | Gastrointestinal |
| GM | Gram |
| GP | General practitioner |
| GR | Grade, grain(s) |
| GU | Genitourinary |
| GYN | Gynecology |
| | |
| HB | Hemoglobin |
| HCG | Human chorionic gonadotropin |
| HCT | Hematocrit |
| HCVD | Hypertensive cardiovascular disease |
| HD | Heart disease |

| | |
|---|---|
| HEENT | Head, eyes, ears, nose & throat |
| HGB | Hemoglobin |
| HIV | Human immunodeficiency virus |
| $HN_2$ | Nitrogen mustard |
| $H_2O$ | Water |
| H/O | History of |
| HORM | Hormone |
| HOSP | Hospital |
| H&P | History and physical |
| HPF | High power field |
| HPI | History of present illness |
| HPV | Human papilloma virus |
| HR(S) | Hour(s) |
| HTLV-III | Human T-lymphotrophic virus type III |
| HVD | Hypertensive vascular disease |
| HX | History |
| HYST | Hysterectomy |
| | |
| I | Iodine |
| ICD-O-1 | International Classification of Diseases for Oncology, 1st Ed., 1976 |
| ICD-O-2 | International Classification of Diseases for Oncology, 2nd Ed., 1992 |
| ICM | Intercostal margin |
| ICS | Intercostal space |
| ICU | Intensive care unit |
| IG | Immunoglobulin |
| IM | Intramuscular |
| IMA | Internal mammary artery |
| IMP | Impression |
| INCL | Includes, including |
| INF | Inferior |
| INF | Infraction |
| INF | Infusion |
| INFILT | Infiltrating |
| INJ | Injection |
| INT MED | Internal medicine |
| IP | Inpatient |
| IPPB | Intermittent positive pressure breathing |
| IT | Intrathecal |
| IV | Intravenous |
| IVC | Inferior vena cava |
| IVP | Intravenous pyelogram |
| | |
| JVD | Jugular venous distention |
| | |
| K | Potassium |
| KG | Kilogram |
| KJ | Knee jerk |
| KK | Knee kick |
| KUB | Kidneys, ureters, bladder |
| KV | Kilovolt |
| | |
| L | Left |
| L | Liter |
| L | Lower |
| L1-L5 | Lumbar vertebrae |
| LAP | Laparotomy |
| LAT | Lateral |
| LAV | Lymphadenopathy-associated virus |
| LCM | Left costal margin |
| LDH | Lactic dehydrogenase |
| LE | Lower extremity; Lupus erythematosus |
| LFT | Liver function test |
| LG | Large |
| LIF | Left iliac fossa |
| LINAC | Linear accelerator |
| LIQ | Lower inner quadrant (breast) |
| LKS(B) | Liver, kidney, spleen, (bladder) |
| LLE | Left lower extremity |
| LLL | Left lower lobe (lung) |
| LLQ | Left lower quadrant (abdomen) |
| LMD | Local medical doctor |
| LMP | Last menstrual period |
| LN(S) | Lymph node(s) |
| LOP | Lower outer quadrant (breast) |
| LP | Lumbar puncture |
| LPF | Low power field |
| LPN | Licensed practical nurse |
| LS | Lumbosacral |
| LSK, LKS | Liver, spleen, kidneys |
| LSO | Left salpingo-oophorectomy |
| L-SPINE | Lumbar spine |
| LT | Left |
| LUE | Left upper extremity |
| LUL | Left upper lobe (lung) |
| LUQ | Left upper quadrant (abdomen) |
| L&W | Living and well |
| | |
| M | Monocytes, meter |
| MAL | Malignant |
| MALIG | Malignant |
| MAND | Mandible |
| MAST | Mastectomy |
| M-CSF | Macrophage Colony-Stimulating Factor |
| MC | Millicurie |
| MCH | Mean corpuscular hemoglobin |
| MCHC | Mean corpuscular hemoglobin count |
| MCL | Mid clavicular line |
| MCV | Mean corpuscular volume |
| MD | Medical Doctor |
| MD | Moderately differentiated |
| MET, METS | Metastatic, metastases |
| MEV | Million electron volts |
| MH | Marital history |
| MH | Mental health |
| MG | Milligram |
| MICRO | Microscopic |
| ML | Middle lobe |
| ML | Milliliter |
| MM | Millimeter |
| MOD | Moderate |
| MOD DIFF | Moderately differentiated |
| MRI | Magnetic resonance imaging |
| MRM | Modified radical mastectomy |
| MS | Mitral stenosis |
| MS | Multiple sclerosis |
| MSL | Mid sternal line |
| MX | Microscopic |
| MX | Maxilla(ry), maximum |
| | |
| NA | Not applicable |
| NBS | Normal bowel sounds |
| NEC | Not elsewhere classified |

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

| | |
|---|---|
| SARC | Sarcoma |
| SB | Small bowel |
| SBE | Subacute bacterial endocarditis |
| SCC | Squamous cell carcinoma |
| SGOT | Serum glutamic oxaloacetic transaminase |
| SGPT | Serum glutamic pyruvic transaminase |
| SH | Social history |
| SH | Serum hepatitis |
| SM | Small |
| SMA | Sequential multiple analysis (Biochem profile) |
| SML | Small |
| SML BWL | Small bowel |
| SNF | Skilled nursing facility |
| SO | Salpingo-oophorectomy |
| SOB | Shortness of breath |
| SOL | Solution |
| S/P | Status post |
| SPEC | Specimen |
| SP GR | Specific gravity |
| S-Q, SQ | Subcutaneous |
| SQ, SQUAM | Squamous |
| SQ CELL CA | Squamous cell carcinoma |
| SR | Sedimentation rate |
| S-SPINE | Sacral spine |
| STAPH | Staphylococcus |
| STAT | Immediately (statim) |
| STREP | Streptococcus |
| STSG | Split thickness skin graft |
| SUB-Q, SUBQ | Subcutaneous |
| SURG | Surgery, surgical |
| 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) |
| UMB | Navel (umbilicus) |
| UNDIFF | Undifferentiated |
| UOQ | Upper outer quadrant (abdomen) |
| UR | Urine |
| URI | Upper respiratory infection |
| UROL | Urology |
| VAG | Vagina, Vaginal |
| VAG HYST | Vaginal hysterectomy |
| VAIN | Vaginal intraepithelial neoplasia |
| VASC | Vascular |
| VD | Venereal disease |
| VIN | Vulvar intraepithelial neoplasia |
| VS | Vital signs |
| W/ | With |
| WBC | White blood cells |
| W/D | Well developed |
| WD, WELL DIFF | Well differentiated |
| W/F | White female |
| W/M | White male |
| WNL | Within normal limits |
| W/O | Without |
| WT | Weight |
| W/U | Work-up |
| XR | X-ray |
| Y/O | Year old |
| YR | Year |

Table of Contents
Manuals

Definition Index

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

| | |
|---|---|
| Carcinoma-in situ | CIS |
| Centigrade | C |
| Centimeter | CM |
| Central nervous system | CNS |
| Cerebrospinal fluid | CSF |
| Cerebrovascular accident | CVA |
| Certified Tumor Registrar | CTR |
| Cervical spine | C-SPINE |
| Cervical intraepithelial neoplasia | CIN |
| Cervical vertebrae | C1-C7 |
| Cervix | CX |
| Cesium | CS |
| Chemotherapy | CHEMO |
| Chest x-ray | CXR |
| Chief complaint | CC |
| Chronic myeloid/myelocytic leukemia | CML |
| Chronic | CHR |
| Chronic granulocytic leukemia | CGL |
| Chronic lymphocytic leukemia | CLL |
| Cigarettes | CIG |
| Cobalt 60 | Co60 |
| Colony-stimulating factor | CSF |
| Common bile duct | CBD |
| Complaining of | C/O |
| Complete blood count | CBC |
| Computerized (axial) tomography scan | CT SC |
| Congestive heart failure | CHF |
| Consistent with | C/W |
| Coronary care unit | CCU |
| Costal margin | CM |
| Costovertebral angle | CVA |
| Cubic centimeter | CC |
| Cystoscopy | CYSTO |
| Cytology | CYTO |
| Cytomegalovirus | CMV |
| Genitourinary | GU |
| Date of birth | DOB |
| Date of death | DOD |
| Dead on arrival | DOA |
| Deep tendon reflex | DTR |
| Deoxyribonucleic acid | DNA |
| Dermatology | DERM |
| Diagnosis | DX |
| Diameter | DIAM |
| Differentiated, differential | DIFF |
| Dilatation and curettage | D&C |
| Discharge | DIS, DISCH |
| Discharge | DC, DS |
| Discharge diagnosis | DD |
| Discontinued | DC |
| Disease | DIS |
| Doctor of Osteopathy | DO |
| Dyspnea on exertion | DOE |
| Each eye (oculus uterque) | OU |
| Ears, nose & throat | ENT |
| Electrocardiogram | ECG, EKG |
| Electroencephalogram | EEG |
| Electromyogram | EMG |
| Electroshock therapy | EST |
| Emergency room | ER |
| Endoscopic retrograde cholangiopancreatography | ERCP |
| Enlarged | ENL |
| Erect (standing), posterior, anterior | EPA |
| Esophagogastroduodenoscopy | EGD |
| Estrogen receptor (assay) | ER(A) |
| Examination | EXAM |
| Examination under anesthesia | EUA |
| Excision | EXC |
| Exploratory laparotomy | EXP LAP |
| Extend, extension | EXT |
| Extended care facility | ECF |
| External | EXT |
| Extremity | EXT |
| Eyes, ears, nose & throat | EENT |
| Fahrenheit | F |
| Family (medical) history | F(M)H |
| Fasting blood sugar | FBS |
| Fever unknown origin | FUO |
| Fingerbreadth | FB |
| First dorsal vertebra, second dorsal vertebra, etc. | $D_1$, $D_2$, etc. |
| Flat plate | FP |
| Floor of mouth | FOM |
| Fluoroscopy | FLURO |
| Follow up | FU |
| Fracture | FX |
| Frozen section | FS |
| Gallbladder | GB |
| Gastric analysis | GA |
| Gastroenterostomy | GE |
| Gastroesophageal | GE |
| Gastrointestinal | GI |
| Generalized | GEN |
| General practitioner | GP |
| Genitourinary | GU |
| Grade, grain(s) | GR |
| Gram | GM |
| Gynecology | GYN |
| Head, eyes, ears, nose & throat | HEENT |
| Heart | COR |
| Heart disease | HD |
| Hematocrit | HCT |
| Hemoglobin | HB, HGB |
| High power field | HPF |
| History | HX |
| History and physical | H&P |
| History of | H/O |
| History of present illness | HPI |
| Hormone | HOR |
| Hospital | HOSPM |
| Hour(s) | HR(S |
| Human chorionic gonadotropin | HCG) |
| Human papilloma virus | HPV |
| Human immunodeficiency virus | HIV |
| Human T-lymphotrophic virus type III | HTL |
| Hypertensive cardiovascular disease | HCVV-III |
| Hypertensive vascular disease | HVDD |
| Hysterectomy | HYST |
| Immediately (statim) | STAT |
| Immunoglobulin | IG |

| | |
|---|---|
| Impression | IMP |
| Includes, including | INCL |
| Inferior | INF |
| Inferior vena cava | IVC |
| Infiltrating | INFILT |
| Infraction | INF |
| Infusion | INF |
| Injection | INJ |
| Inpatient | IP |
| Intensive care unit | ICU |
| Intercostal margin | ICM |
| Intercostal space | ICS |
| Intermittent positive pressure breathing | IPPB |
| Internal mammary artery | IMA |
| Internal medicine | INT MED |
| International Classification of Diseases for Oncology, 1st Ed., 1976 | ICD-O-1 |
| International Classification of Diseases for Oncology, 2nd Ed., 1992 | ICD-O-2 |
| Intramuscular | IM |
| Intrathecal | IT |
| Intravenous | IV |
| Intravenous pyelogram | IVP |
| Iodine | I |
| Jugular venous distention | JVD |
| Kidneys, ureters, bladder | KUB |
| Kilogram | KG |
| Kilovolt | KV |
| Knee kick | KK |
| Knee jerk | KJ |
| Lactic dehydrogenase | LDH |
| Laparotomy | LAP |
| Large | LG |
| Last menstrual period | LMP |
| Lateral | LAT |
| Left | L, LT |
| Left costal margin | LCM |
| Left eye (oculos sinister) | OS |
| Left ilial fossa | LIF |
| Left lower extremity | LLE |
| Left lower lobe (lung) | LLL |
| Left lower quadrant (abdomen) | LLQ |
| Left upper extremity | LUE |
| Left upper lobe (lung) | LUL |
| Left upper quadrant (abdomen) | LUQ |
| Left salpingo-oophorectomy | LSO |
| Licensed practical nurse | LPN |
| Linear accelerator | LINAC |
| Liter | L |
| Liver function test | LFT |
| Liver kidney, spleen (bladder) | LKS(B) |
| Liver, spleen, kidneys | LSK, LKS |
| Living and well | L&W |
| Local medical doctor | LMD |
| Low power field | LPF |
| Lower | L |
| Lower extremity | LE |
| Lower inner quadrant (breast | LIQ |
| Lower outer quadrant (breast) | LOQ |
| Lumbar puncture | LP |
| Lumbar spine | L-SPINE |
| Lumbar vertebrae | L1-L5 |
| Lumbosacral | LS |
| Lupus erythematosus | LE |
| Lymph node(s) | LN(S) |
| Lymphadenopathy associated virus | LAV |
| Macrophage Colony-Stimulating Factor | M-CSF |
| Magnetic resonance imaging | MRI |
| Malignant | MAL, MALIG |
| Mandible | MAND |
| Marital history | MH |
| Mastectomy | MAST |
| Maxilla(ry), maximum | MX |
| Mean corpuscular hemoglobin | MCH |
| Mean corpuscular volume | MCV |
| Mean corpuscular hemoglobin count | MCHC |
| Medical Doctor | MD |
| Mental health | MH |
| Metastatic, metastases | MET, METS |
| Microscopic | MX |
| Microscopic | MICRO |
| Mid clavicular line | MCL |
| Mid sternal line | MSL |
| Middle lobe | ML |
| Millicurie | MC |
| Milligram | MG |
| Milliliter | ML |
| Millimeter | MM |
| Million electron volts | MEV |
| Mitral stenosis | MS |
| Moderate | MOD |
| Moderately differentiated | MD |
| Moderately differentiated | MOD DIFF |
| Modified radical mastectomy | MRM |
| Monocytes, meter | M |
| Mouth | OS |
| Multiple sclerosis | MS |
| Nausea and vomiting | N&V |
| Navel (umbilicus) | UMB |
| Neck vein distention | NVD |
| Negative | NEG or - |
| Neurology | NEURO |
| Nitrogen mustard | $HN_2$ |
| No evidence of disease | NED |
| No evidence of recurrent disease | NERD |
| No significant findings | NSF |
| Normal | NL |
| Normal bowel sounds | NBS |
| Normal breath sounds | NBS |
| Normal temperature and pressure | NTP |
| Not applicable | NA |
| Not elsewhere classified | NEC |
| Not otherwise specified | NOS |
| Not reportable | NR |
| Not recorded | NR |
| Number of pregnancies resulting in viable infants | PARA |
| Obstetrics | OB |
| Obstructed (ing, ion) | OBST |
| Occupational history | OH |

| | |
|---|---|
| Occupational therapy | OT |
| Office visit | OV |
| Opening | OS |
| Operating room | OR |
| Operation | OP |
| Ophthalmology | OPHTH |
| Orthopedics | ORTH |
| Osteomyelitis | OSTEO |
| Otology | OTO |
| Ounce | OZ |
| Outpatient | OP |
| Outpatient clinic | OPD |
| Outpatient department | OPD |
| Packed cell volume | PCV |
| Packs per day | PPD |
| Palpable, palpated, palpation | PALP |
| Papanicolaou smear | PAP |
| Papillary | PAP |
| Past medical history | PMH |
| Past or personal history | PH |
| Pathology | PATH |
| Patient | PT |
| Pediatrics | PED |
| Pelvic inflammatory disease | PID |
| Percussion and auscultation | P&A |
| Percutaneous | PERC |
| Personal (primary) medical doctor | PMD |
| Physical examination | PE |
| Physicians' Desk Reference | PDR |
| Physiotherapy | PT |
| Platelets | PLT |
| Pneumoencephalography | PEG |
| Poorly differentiated | PD |
| Positive | POS or + |
| Positron emission tomography | PET |
| Possible | POSS |
| Post anesthesia room | PAR |
| Post mortem (after death) | PM |
| Posterior | POST |
| Posteroanterior | PA |
| Postmortem examination | POST |
| Postnasal drip | PND |
| Postoperative day | POD |
| Postoperative(ly) | PO, POSTOP |
| Potassium | K |
| Preoperative(ly) | PREOP |
| Present illness | PI |
| Prior to admission | PTA |
| Probable(ly) | PROB |
| Progesterone receptor (assay) | PR(A) |
| Pulmonary | PULM |
| Pulmonary artery | PA |
| Pulse | P |
| Purified protein derivative (Tuberculin skin test) | PPD |
| Pyrexia of undetermined origin | PUO |
| Quadrant | Q |
| Radiation | RAD |
| Radiation absorbed dose | RAD |
| Radiation therapy | RT |
| Radical | RAD |
| Radioactive iodine (I 131) uptake | RAIU |
| Radioencephalogram | REG |
| Radioimmunoassay | RIA |
| Radium | RA |
| Range of motion | ROM |
| Rectovaginal | R-V |
| Red blood cells | RBC |
| Reed-Sternberg cells | R-S CELLS |
| Registered nurse | RN |
| Resection | RESEC |
| Respiration | R |
| Respiratory | RESPIR |
| Reticuloendothelial system | RES |
| Reticulum cell sarcoma | RCS |
| Review of systems | ROS |
| Review of outside slides | ROS |
| Review of outside films | ROF |
| Rhesus (monkey) factor in blood | RH |
| Ribonucleic acid | RNA |
| Right | RT |
| Right costal margin | RCM |
| Right eye (oculus dexter) | OD |
| Right iliac fossa | RIF |
| Right inner quadrant (abdomen) | RIQ |
| Right lower extremity | RLE |
| Right lower lobe (lung) | RLL |
| Right lower quadrant | RLQ |
| Right middle lobe (lung) | RML |
| Right outer quadrant (abdomen) | ROQ |
| Right salpingo-oophorectomy | RSO |
| Right upper extremity | RUE |
| Right upper lobe | RUL |
| Roentgen | R |
| Rule out | RO, R/O |
| Sacral spine | S-Spine |
| Sacral vertebrae | S1-S5 |
| Salpingo-oophorectomy | SO |
| Sarcoma | SARC |
| Sedimentation rate | SR |
| Sequential multiple analysis (Biochem profile) | SMA |
| Serum glutamic oxaloacetic transaminase | SGOT |
| Serum glutamic pyruvic transaminase | SGPT |
| Serum hepatitis | SH |
| Shortness of breath | SOB |
| Silver nitrate | $AGNO_3$ |
| Skilled nursing facility | SNF |
| Small | SM, SML |
| Small bowel | SML BWL |
| Small bowel | SB |
| Social history | SH |
| Solution | SOL |
| Special lymphocytes formed in bone marrow (derived from bursa of Fabricius) | B-CELLS |
| Specific gravity | SP GR |
| Specimen | SPEC |
| Split thickness skin graft | STSG |
| Squamous | SQ, SQUAM |
| Squamous cell carcinoma | SCC |
| Squamous cell carcinoma | SQ CELL CA |

| | | | |
|---|---|---|---|
| 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 | UROL | | |
| 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 | $H_2O$ | | |
| 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/ | | |

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Symbol Index

| Symbol | Term(s) |
|---|---|
| 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 |
| C̄ | With |
| S̄ | 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 co-operation 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 MEDLARS system.

PDQ — 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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