Medical Terminology / Lecture (3)

CHAPTER

Frequently Used Building Blocks

KEY TERMS

| Anatomy | (ah-NAT-oh-mee) | The study of the structure of an organism |
|------------|-----------------------------|---|
| pathology | (pah-THOL-oh-jee) | The study of the basic nature of disease |
| | | and the changes in the structure and |
| | | function of cells, tissues, and organs that |
| | | lead to disease |
| physiology | (fiz-ee- OL -oh-jee) | The study of how a living organism and |
| | | its chemical processes involved in those |
| | | functions |
| Surgery | (SER-jer-ee) | The branch of medicine in which manual |
| | | and operative procedures are used to |
| | | cored deformities and defects, to repair |
| | | injuries, to diagnose and treat certain |
| | | diseases |

On the following pages are prefixes, roots, and suffixes that you will use throughout this text in achieving your goal of developing a practical medical vocabulary. Some you will recognize from chapter 1. Many of these building blocks will appear again and for table with these basic word parts. In later chapters you will add new terms that relate to specific body systems.

The prefixes and roots are listed in alphabetic order. The suffixes are listed in three separate groups to help you remember how they are used (figure 2.1) these groups are:

Anatomy and physiology

pathology

Surgical or treatment

Figure 2.1 many word parts can be grouped by type of use

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•Suffixes related to anatomy and physiology. These word endings refer to a structure or function of the body in a normal state.

•Suffixes related to pathology. These word endings indicate the nature and cause of conditions that occur with a change from normal.

•Suffixes related to surgery or treatment. The surgical suffixes describe what was or will be done either manually or through a cutting procedure to change a body condition

FREQUENTLY USED SUFFIXES

Anatomy and physiology

| Suffix | Meaning | Example word and definition |
|----------------|--------------------|---|
| -blast | Immature stage of | Myoblast (MY-oh-blast):the immature |
| | cell | stage of a muscle-forming cell |
| -cyte | Mature cell | Leukocyte (LOO-koh-sight): a white |
| | | blood cell |
| -genesis | Production, | Myogenesis (MY-oh-JEN-eh-sis): |
| | Development | development of muscle tissue |
| -genic | Origination | Carcinogenic (Kar- sil- noh- JEN-ick): |
| | | Producing cancer |
| -phagia, phagy | Eating, swallowing | Dysphagia (dis-FAY-jee-ah): |
| | | difficulty in swallowing |
| -phasia | Speaking | Aphasia (ah- FAY- zee- ah): loss of |
| | | impairment of speech |
| -poiesis | Formation | Hidropoiesis (high- droh- poy- ee- sis): |
| | | the formation of sweat |

Pathology

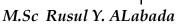
| Suffix | Meaning | Example word and definition |
|----------|-----------------------|---|
| | | |
| -algia | Pain | Analgia (an- AL- jee- ah): absence of |
| | | pain |
| -cele | Pouching, hernia | Enterocele (EN- ter- oh- sell): hernia of |
| | . | the intestine |
| -dynia | Pain | Gastrodynia (gas- troh- DIN- ee- ah): pain |
| • | | in the stomach |
| -ectasis | Dilatation, expansion | Angiectasis (an- hee- ECK- tah- sis): |
| | D1 1 | dilatation of a blood or lymph vessel |
| -emia | Blood | Glycemia (glie-SEE-mee- ah):sugar in the |
| | | blood. |
| | | Note: in this form, the it is dropped from |
| | | the root heme, which means blood. |
| -iasis | Condition, presence | Cholelithiasis (koh- lee- lih-THIGH ah- |
| | of | sis): presence of stones in the gallbladder |
| -it is | Inflammation | Bronchitis (brong- KYE- tis): |
| | | inflammation of the breathing tubes |
| -lysis | Dissolution, | Cytolysis (sigh- TOL- ih- sis): |
| • | breaking down | inflammation of the breathing tubes |
| -malacia | Softening | Splenomalacia |
| | | (spleh- no- mah-LAY- she- ah): softening |
| | | of the spleen |
| -megaly | Enlargement | Acromegaly (ack- roh- MEG- ah- lee): |
| (| Т.У | Enlargement of the extremities (arms and |
| 4 | | legs) |
| -oid | Resembling, like | Fibroid (FIE-broyed): containing or |
| | 2 | resembling fibers |
| -oma | Tumor | Lipoma (lih-POH- mach): a fatty tumor |
| -osis | Abnormal condition | Dermatosis (der- mah- TOH- sis): any |
| v | | skin disease |
| -pathy | Disease | Uropathy (you- ROP- ah- thee): any |
| - | | abnormality of the urinary tract |
| -penia | Abnormal reduction | Cytopenia (sigh- toh- PEE- nee- nee- ah): |
| | | Deficient number of cells |

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| Exaggerated fear | Agoraphobia (ag- oh- rah-FOH- bee- ah): fear of being in a large open space |
|-------------------------------|--|
| Paralysis | Hemiplegia (hem- ee- PLEE- jee- ah): paralysis of half of the body |
| Downward Displacement | Blepharoptosis (blef- ah- roh- TOH-sis): drooping of an upper eyelid |
| Excessive flow, hemorrhage | Rhinorrhagia (rye- no- RAY- jee- ah): profuse bleeding from the nose |
| Discharge | Pyorrhea (pie- oh- REE- ah): discharge of pus |
| Rupture | Angiorrhexis (an- jee- oh- RECK- sis): rupture of a vessel |
| Urine | Hematuria (hem- ah- TOO- ree- ah): blood in the urine |
| - | Paralysis Downward Displacement Excessive flow, hemorrhage Discharge Rupture |

Surgery or treatment

| l | Suffix | Meaning | Example word and definition |
|---|------------|-------------------------|--|
| | -centesis | Puncture for aspiration | Cephalocentesis |
| | | (draining) | (sef- ah- loh- sen- TEE- sis): surgical |
| | | | Puncture of skull |
| | -desis | Binding, fixation | Arthrodesis (ar- throh- DEE- sis): |
| | • | | Surgical fixation of a joint |
| | -ectomy | Excision, cutting out | Appendectomy |
| | | | (ap- en- DECK- toh- mee):excision of the |
| | | | appendix |
| t | -pexy | To fix in place | orchiopexy (or- kee- oh- peck- see): |
| | | | suturing (stitching) of an |
| ľ | | | Undescended testis to fix it in the |
| | | | scrotum |
| | -plasty | To mold or shape | otoplasty (OH- toh-plas- tee): plastic |
| | | | Surgery of the ear |
| | -rhaphy | Suturing (stitching or | glossorrhaphy (glaw- SOR- ah- free): |
| | | closing) | Suturing of a wound of the tongue |
| l | -sclerosis | Hardening | arteriosclerosis |
| _ | | | (ar- tee- ree- oh- skleh- ROH- sis). |



| | | hardening of the arteries |
|---------|----------------------|---|
| -scope | Examining instrument | anoscope (AY- noh-skohp): instrument |
| | | for examining the lower rectum and anu |
| -scopy | Internal examination | Cystoscopy (sis- TOS- koh- pee): the |
| | | process of examining the bladder with a |
| | | cystoscope |
| -stomy | Creation of opening | Enterostomy (en- ter- OS- toh- mee): |
| | | Surgical creation of a permanent opening |
| | | into an intestine through the abdominal |
| | | wall |
| -tomy | Incising or cutting | Nephrotomy (neh- FRAH- toh- mee): |
| | | Cutting into the kidney |
| -tripsy | Crushing, friction | Lithotripsy (LITH- oh- trip- see): |
| | | crushing of a stone. Used in referring to |
| | | stone in the bladder or urethra |

• Frequently used roots

The following list includes some commonly used roots. You may notice that two apparently different roots are used to refer to the same structure or organ. For example, the root *hyster* and the root *uter* are both used in words referring to the womb. The root hyster comes to us from the Greeks; the root *uter* is latin. The two roots are both used.

Root and

Combining vowel

| (if used) | Meaning | Example word and definition |
|-----------|---------|---|
| Aden/o | Gland | Adenoid (ADD- eh- noyd: resembling or having the appearance of a gland |
| Angi/o | Vessel | Angiotomy (an- jee- OT- oh- mee): cutting of blood vessels |
| Arter/i/o | Artery | Arteriosclerosis (ar- tee- ree- oh- skleh- ROH- sis): thickening ("hardening") of an artery |
| Arthr/o | Joint | Arthralgia (ar- THRAL- jee- ah): pain in a joint |

| Cardi/o | Heart | Cardioptosis (kar- dee- op- TOH- sis): |
|------------------|----------------|---|
| <u> </u> | . | prolapsed of the heart |
| Cephal/o | Head | Cephalad (SEF- ah- lad): toward the head |
| Cerebr/o | Brain | Cerebropathy (ser- eh- BROP- ah- thee): |
| | | any morbid condition of the brain |
| Cheil/o | Lip | Cheilosis (kye- LOH- sis): abnormal |
| | Q (1 | condition of the lips |
| Chondr/o | Cartilage | Chondrocyte (KON- droh- sight): a |
| 0 | וי ת | cartilage cell |
| Cost/o | Rib | Costectomy (kos-TECK-toh-mee): |
| O '' | 0 1 11 | surgical removal of a rib |
| Crani/o | Cranium, skull | Craniometer (KRAY- nee- ah- meh- ter): |
| 0 | 011.11 | instrument for measuring the skull |
| Cyst/o | Sac, bladder | Cystolith (SIS- toh- lith): a bladder stone |
| cyt/o | Cell | cytoblast (SIGH- toh- blast): a cell |
| | <u>01</u> : | nucleus |
| Derm/o, dermat/o | Skin | Dermomycosis |
| | | (der- moh- my- KOH- sis): a skin disease |
| | | caused by a fungus |
| Encephal/o | Brain | Encephalocele (en- SEF- ah- loh- seel): |
| | | herniation of the brain through a crack or |
| | T | fissure of the skull |
| Enter/o | Intestine | Enterospasm (EN- ter- oh- spazm): |
| | | painful contractions (cramps) of the |
| | | intestine |
| Gastr/o | Stomach | Glossoplegia (gas- TRECK- toh- mee): |
| | | surgical removal of part or all of the |
| | | stomach |
| Gloss/o | Tongue | Glossoplegia (glos- oh- PELE- jee- jee- |
| | | ah): paralysis of the tongue |
| Hem/o, hemat/o | Blood | Hemocyte (HEE- moh- sight): a blood |
| | | cell |
| Hepat/o | Liver | Hepatitis (hep-ah-TIE-tis): |
| | | inflammation of the liver |
| Hyster/o | Uterus | Hysterectomy(his- ter- ECK- toh- mee): |
| | | surgically removing the uterus |
| Mamm/o, mast/o | Breast | Mammoplasty (MAM- oh- plas- tee): |

| | | surgical alteration of the size of the vreast which may involve an increase or a decrease |
|-----------------|-----------|---|
| | | Mastitis (mass- TIE- tis): inflammation of |
| | | the breast |
| My/o | Muscle | Myoatrophy (MY- oh- AT- roh- fee): |
| 112970 | Widdere | Wasting away of muscle |
| Nas/o, rhin/o | Nose | Nasogastric tube (nay- zoh- GAS- trick |
| , | | Tewb): a tube that is inserted through the |
| | | nose and extends into the stomach |
| | | Rhinitis (rye- NIGH- tis): |
| | | Inflammation of the mucous lining |
| | | (mucosa) of the nose |
| Nephr/o, ren/o | Kidney | Nephroptosis (nef- rop- TOH- sis): |
| | | Downward displacement of the kidney |
| Neur/o | Nerve | Neurectomy (new- RECK- toh- mee): |
| | | Partial or total excision of a nerve |
| Ocul/o, | Eye | Oculogyric (ock- you- loh- JYE- rick): |
| ophthalm/o | | Pertaining to movements of the eye |
| Or/o, stoma, | Mouth | Oronasal (oh- roh- NAY- zal): |
| stomat/o | | Concerning the mouth and nose |
| | | Stomatitis (stoh- mah- TIE- tis): |
| | | Inflammation of the mouth |
| Oste/o | Bone | Osteectopia (os- tee- eck- TOH- pee- ah): |
| | | Displacement of a bone |
| Ot/o | ear | Otalgia (oh- TAL- jee- ah): pain in an ear |
| Pharyng/o | Pharynx | Pharyngeal (fah- RIN- jee- al): |
| | | Concerning the pharynx |
| Phleb/o | vein | Phlebostenosis |
| | | (fleb- oh- steh- NOH- sis): narrowing or |
| | | constriction of a vein |
| Pneum/o, | Lung, air | Pneumectomy (new-MECK- toh- mee): |
| Pneumon/o, | | Excision of all or part of a lung |
| Pulmon/o | | Pneumatosis (new- mah- TOH- sis): |
| | | Abnormal presence of air or gas in the |
| | | body |
| Proct/o, rect/o | Rectum | Proctocele (SROCK- toh- seel): a |

