

## Lesson 1 — Reading Assignment

**aden-** a gland; a body part that separates certain elements and secretes them in a form for the body to use or for elimination (e.g. sweat, urine)

Examples of glands:

<b>Gland</b>	<b>Secretion</b>
kidney	urine
mammary (mamm = breast)	milk
salivary	saliva

Examples:

adenic (aden/ic) — pertaining to a gland or the glands  
adenopathy (aden/o/path/y) — any disease of a gland  
adenectomy (aden/ectomy) — surgical removal (excision) of all or part of a gland  
adenosis (aden/osis) — any condition of a gland  
adenotomy (aden/otomy) — cutting into (incision of) a gland  
adenoma (aden/oma) — a tumor with a glandlike structure (a glandular tumor)

Important: **Adenoma** does *not* mean tumor of a gland. An **adenoma is** a tumor with a glandlike structure (a glandular tumor) of any body part.

Examples of adenoma:

blepharadenoma (blephar/aden/oma) — a glandular tumor of the eyelid (an adenoma of the eyelid)

nephradenoma (nephr/aden/oma) — a glandular tumor of the kidney (an adenoma of the kidney)

**angi-** the blood vessels, a blood vessel; this element actually means “vessel” and, therefore, may be used to designate any of the tubes, ducts, or canals which convey the fluids of the body. However, its principal reference is to the blood vessels.

Examples:

angiitis (angi/itis) — inflammation of a vessel — usually a blood vessel  
angiectomy (angi/ectomy) — surgical removal of a vessel  
angiomegaly (angi/o/megal/y) — enlargement of the vessels  
angiopathy (angi/o/path/y) — any disease of the vessels  
angiomalacia (angi/o/malacia) — softening of the vessels  
angiosis (angi/osis) — any condition of the vessels

Note: Osis is often used to denote a disease; therefore, angiosis could mean any disease of the vessels.

**arthr-** a joint; a joint of the body; the point where two bones come together

Examples:

arthral (arthr/al) — pertaining to a joint  
arthritis (arthr/itis) — inflammation of a joint  
arthrotomy (arthr/otomy) — cutting into or incision of a joint  
arthrosis (arthr/osis) — any condition or disease of a joint  
arthropathy (arthr/o/path/y) — any disease of a joint  
arthrectomy (arthr/ectomy) — surgical removal or excision of a joint  
arthroplasty (arthr/o/plast/y) — plastic repair (or surgery) of a joint

**blephar-** the eyelid

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### Examples:

- blepharal (blephar/al) — pertaining to the eyelid
- blepharoplasty (blephar/o/plast/y) — plastic repair or surgery of an eyelid
- blepharospasm (blephar/o/spasm) — involuntary contractions of the eyelid
- blepharadenoma (blephar/aden/oma) — a glandular tumor of the eyelid
- blepharitis (blephar/itis) — inflammation of an eyelid
- blepharectomy (blephar/ectomy) — surgical removal (excision) of all or part of the eyelid

**cardi-** the heart

### Examples:

- cardiac (cardi/ac) — pertaining to the heart
- cardiopathy (cardi/o/path/y) — any disease of the heart
- carditis (card/itis) — inflammation of the heart
- cardiology (cardi/ology) — the study of the heart
- cardiologist (cardi/ologist) — a specialist in the study of the heart
- cardiomegaly (cardi/o/megal/y) — enlargement of the heart
- cardiomalacia (cardi/o/malacia) — softening of the heart
- cardiotomy (cardi/otomy) — cutting into (incision) of the heart

**cerebr-** the brain

### Examples:

- cerebral (cerebr/al) — pertaining to the brain
- cerebrum (cerebr/um) — the main part of the brain
- cerebritis (cerebr/itis) — inflammation of the brain
- cerebrospinal (cerebr/o/spin/al) — pertaining to the brain and the spinal cord
- cerebrosis (cerebr/osis) — any condition or disease of the brain
- cerebromalacia (cerebr/o/malacia) — softening of the brain
- cerebrology (cerebr/ology) — the study of the brain
- cerebropathy (cerebr/o/path/y) — any disease of the brain

**dermat-** (also *derm-*) the skin

### Examples:

- dermal (derm/al) — pertaining to the skin
- dermatic (dermat/ic) — pertaining to the skin
- dermic (derm/ic) — pertaining to the skin
- derma (derm/a) — the skin
- dermis (derm/is) — the skin
- dermatitis (dermat/itis) — inflammation of the skin
- dermatomegaly (dermat/o/megal/y) — enlargement of the skin; a condition in which the skin is larger than is necessary to cover the body so that it hangs in folds
- dermatosis (dermat/osis) — any condition or disease of the skin
- dermatopathy (dermat/o/path/y) — any disease of the skin
- dermatoplasty (dermat/o/plast/y) — plastic repair or surgery on the skin such as skin grafting
- dermatology (dermat/ology) — the study of the skin
- dermatologist (dermat/ologist) — a specialist in the study of the skin
- dermabrasion (derm/abrasion) — a scraping of the skin in order to repair acne scars, blemishes, etc.

**-ectomy** Surgical removal (excision) of all or part of a body part. This suffix is used frequently in medical terminology and can be applied to almost any body part.

### Examples:

- adenectomy (aden/ectomy) — surgical removal of a gland



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angiectomy (angi/ectomy) — surgical removal of a vessel  
arthrectomy (arthr/ectomy) — surgical removal of a joint  
blepharectomy (blephar/ectomy) — surgical removal of an eyelid  
enterectomy (enter/ectomy) — surgical removal of the intestines  
gastrectomy (gastr/ectomy) — surgical removal of the stomach  
nephrectomy (neph/ectomy) — surgical removal of the kidney

**enter-** the intestines; the twenty-foot tube in the abdomen which completes the digestion of food begun in the stomach

### Examples:

enteral (enter/al) — pertaining to the intestines  
enteric (enter/ic) — pertaining to the intestines  
gastroenter- (gastr/o/enter-) — the stomach and intestines  
enteritis (enter/itis) — inflammation of the intestines  
enterectomy (enter/ectomy) — excision of a part of the intestines  
enteropathy (enter/o/path/y) — any disease of the intestines  
enteroplasty (enter/o/plast/y) — plastic repair or surgery of the intestines  
enteraden- (enter/aden-) — any gland of the intestines  
enteradenitis (enter/aden/itis) — inflammation of the glands of the intestines

**gastr-** the stomach; the balloon-like organ in the abdomen which begins the digestion of food

### Examples:

gastric (gastr/ic) — pertaining to the stomach  
gastrointestinal (gastr/o/intestin/al) system — the digestive system; the combination of the stomach and intestines responsible for the digestion of food  
gastroenteric (gastr/o/enter/ic) — pertaining to the stomach and intestines; pertaining to the digestive system  
gastradenitis (gastr/aden/itis) — inflammation of the glands of the stomach  
gastrectomy (gastr/ectomy) — surgical removal of the whole or part of the stomach  
partial gastrectomy — excision of a large portion but not all of the stomach  
hemigastrectomy (hemi/gastr/ectomy) — excision of one half of the stomach (hemi-half, Lesson 2)

**gingiv-** gum; the gums of the mouth; the tissue which forms the collar around each tooth

### Examples:

gingival (gingiv/al) — pertaining to the gums  
gingiva (gingiv/a) — gum of the mouth  
gingivae (gingiv/ae) — gums of the mouth  
gingivitis (gingiv/itis) — inflammation of the gums of the mouth  
gingivectomy (gingiv/ectomy) — excision of the gums of the mouth  
gingivoplasty (gingiv/o/plast/y) — plastic repair or surgery of the gums of the mouth  
gingivosis (gingiv/osis) — a condition or disease of the gums of the mouth

**hepat-** the liver; the largest gland in the body, weighing about three pounds; secretes bile into the intestine for digestion of fats

### Examples:

hepatic (hepat/ic) — pertaining to the liver  
hepatitis (hepat/itis) — inflammation of the liver  
hepatology (hepat/ology) — the study of the liver  
hepatologist (hepat/ologist) — a specialist in the study of the liver  
hepatomegaly (hepat/o/megal/y) — enlargement of the liver



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Examples:

-megaly (megal/y) is the form in which “enlarged” most frequently appears, for example:

adenomegaly (aden/o/megal/y) — enlargement of a gland  
angiomegaly (angi/o/megal/y) — enlargement of a blood vessel  
cardiomegaly (cardi/o/megal/y) — enlargement of the heart  
cerebromegaly (cerebr/o/megal/y) — enlargement of the brain (cerebrum)  
enteromegaly (enter/o/megal/y) — enlargement of the intestines  
gastromegaly (gastr/o/megal/y) — enlargement of the stomach  
hepatomegaly (hepat/o/megal/y) — enlargement of the liver  
nephromegaly (nephr/o/megal/y) — enlargement of a kidney  
cardiohepatomegaly (cardi/o/hepat/o/megal/y) — enlargement of the heart and liver  
hepatonephromegaly (hepat/o/nephr/o/megal/y) — enlargement of the liver and kidney

megalo- (megal/o) is another form for “enlarged.” The format indicating abnormal condition of enlargement is “megalo\_\_\_\_\_ia.” For example:

megalocardia (megal/o/card/ia) — abnormal enlargement of the heart  
megalogastria (megal/o/gastr/ia) — abnormal enlargement of the stomach  
megalohepatia (megal/o/hepat/ia) — abnormal enlargement of the liver

**nephr-** a kidney, the kidneys; the kidneys consist of two bean-shaped glands in the lower back, one on each side of the spinal column. Their function is the filtering of waste materials from the blood and the production and excretion of urine.

Examples:

nephric (nephr/ic) — pertaining to the kidneys  
nephromegaly (nephr/o/megal/y) — enlargement of a kidney  
nephritis (nephr/itis) — inflammation of a kidney  
nephrosis (nephr/osis) — any condition of a kidney  
nephroma (nephr/oma) — tumor of the kidney  
nephropathy (nephr/o/path/y) — any disease of a kidney  
nephrotomy (nephr/otomy) — surgical cutting into (incision) of a kidney  
nephrectomy (nephr/ectomy) — surgical cutting out (excision) of all or part of a kidney  
nephrology (nephr/ology) — study of the kidneys  
nephrologist (nephr/ologist) — a specialist in the study of the kidneys  
nephradenoma (nephr/aden/oma) — glandular tumor of a kidney  
hepatonephromegaly (hepat/o/nephr/o/megal/y) — enlargement of the liver and kidney

**-ologist** a specialist in the study of —; a medical specialist in —; one who has knowledge of or skill in —; an expert —

Examples:

gastrologist (gastr/ologist) — a specialist in the study of the stomach  
cardiologist (cardi/ologist) — a specialist in the study of the heart  
dermatologist (dermat/ologist) — a specialist in the study of the skin  
enterologist (enter/ologist) — a specialist in the study of the intestines  
nephrologist (nephr/ologist) — a specialist in the study of the kidneys  
hepatologist (hepat/ologist) — a specialist in the study of the liver  
rhinologist (rhin/ologist) — a specialist in the study of the nose  
gastroenterologist (gastr/o/enter/ologist) — a specialist in the study of the stomach and intestines  
pathologist (path/ologist) — a specialist in the study of diseases



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hepatonephritis (hepat/o/nephr/itis) — inflammation of the liver and kidney  
hepatonephromegaly (hepat/o/nephr/o/megal/y) — enlargement of the liver and kidney  
hepatectomy (hepat/ectomy) — excision of part of the liver  
hepatomalacia (hepat/o/malacia) — softening of the liver

**-itis** inflammation; “inflammation of —”; a suffix indicating a condition, the symptoms of which are pain or discomfort, redness, heat, and swelling. This suffix can be added to practically all body parts. Notice how rapidly your knowledge of medical terminology expands simply by adding this suffix to the elements of Lesson 1.

Examples:

gastritis (gastr/itis) — inflammation of the stomach  
carditis (card/itis) — inflammation of the heart  
dermatitis (dermat/itis) — inflammation of the skin  
cerebritis (cerebr/itis) — inflammation of the brain (cerebrum)  
enteritis (enter/itis) — inflammation of the intestines  
adenitis (aden/itis) — inflammation of a gland or glands  
angiitis (angi/itis) — inflammation of the vessels  
angitis (ang/itis) — inflammation of the vessels  
nephritis (nephr/itis) — inflammation of the kidney  
hepatitis (hepat/itis) — inflammation of the liver  
blepharitis (blephar/itis) — inflammation of the eyelid  
arthritis (arthr/itis) — inflammation of a joint  
rhinitis (rhin/itis) — inflammation of the nose  
gingivitis (gingiv/itis) — inflammation of the gums of the mouth  
angiocarditis (angi/o/card/itis) — inflammation of the heart and blood vessels  
blepharadenitis (blephar/aden/itis) — inflammation of the glands of the eyelid  
enteradenitis (enter/aden/itis) — inflammation of the glands of the intestines  
enterogastritis (enter/o/gastr/itis) — inflammation of the intestine (small) and the stomach  
enterohepatitis (enter/o/hepat/itis) — inflammation of the intestines and the liver  
gastradenitis (gastr/aden/itis) — inflammation of the glands of the stomach  
gastrohepatitis (gastr/o/hepat/itis) — inflammation of the stomach and liver  
gastroenteritis (gastr/o/enter/itis) — inflammation of the stomach and intestines  
gastronephritis (gastr/o/nephr/itis) — inflammation of the stomach and kidney  
hepatonephritis (hepat/o/nephr/itis) — inflammation of the liver and kidney

**-malacia** soft condition, softness, softening. All body parts have a characteristically normal firmness; abnormal lessening of this firmness is denoted by malacia.

A suffix denoting a condition of softness; this is the form in which the term most frequently appears as in:

adenomalacia (aden/o/malacia) — softening of a gland  
cardiomalacia (cardi/o/malacia) — softening of the heart  
cerebromalacia (cerebr/o/malacia) — softening of the brain (cerebrum)  
hepatomalacia (hepat/o/malacia) — softening of the liver  
nephromalacia (nephr/o/malacia) — softening of the kidney

In structures which are hollow such as vessels or the stomach, softening would be present in the walls of the structure, for example:

angiomalacia (angi/o/malacia) — softening of the walls of a blood vessel  
gastromalacia (gastr/o/malacia) — softening of the walls of the stomach

**megal-** enlarged, literally “pertaining to largeness,” “enlargement of —,” but used principally to denote abnormal size. Body parts have a characteristically normal size related to age, sex, body type, etc. Abnormal increases in size are denoted by “megal.”



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cerebrosis (cerebr/osis) — a condition of the brain (cerebrum)  
enterosis (enter/osis) — a condition of the intestines  
adenosis (aden/osis) — a condition of a gland  
angiosis (angi/osis) — a condition of a blood vessel  
nephrosis (nephr/osis) — a condition of a kidney  
hepatosis (hepat/osis) — a condition of the liver  
arthrosis (arthr/osis) — a condition of a joint  
acidosis (acid/osis) — a condition or disease of acid in the body

**-otomy** cutting into (surgical incision); literally “the act or action of cutting into” — usually for the purpose of exploration, drainage, removal of foreign bodies, etc.

Examples:

adenotomy (aden/otomy) — surgical incision of a gland  
arthrotomy (arthr/otomy) — surgical incision of a joint  
enterotomy (enter/otomy) — surgical incision of the intestines  
gastrotomy (gastr/otomy) — surgical incision of the stomach  
hepatotomy (hepat/otomy) — surgical incision of the liver  
nephrotomy (nephr/otomy) — surgical incision of the kidney

**path-** disease; suffering; feeling

Examples:

pathic (path/ic) — pertaining to disease or feeling  
pathy (path/y) — result of disease; a morbid condition  
pathosis (path/osis) — a condition of disease; -pathy

The -pathy suffix combines with many body parts to denote “any disease of —”.

Examples:

adenopathy (aden/o/path/y) — any disease of a gland  
angiopathy (angi/o/path/y) — any disease of a blood vessel  
arthropathy (arthr/o/path/y) — any disease of a joint  
cardiopathy (cardi/o/path/y) — any disease of the heart  
cerebroopathy (cerebr/o/path/y) — any disease of the brain (cerebrum)  
dermopathy (derm/o/path/y) — any disease of the skin  
dermatopathy (dermat/o/path/y) — any disease of the skin  
enteropathy (enter/o/path/y) — any disease of the intestines  
gastropathy (gastr/o/path/y) — any disease of the stomach  
hepatopathy (hepat/o/path/y) — any disease of the liver  
nephropathy (nephr/o/path/y) — any disease of the kidneys  
rhinopathy (rhin/o/path/y) — any disease of the nose

The -pathic suffix combines with all of the roots listed under -pathy with the meaning “pertaining to any disease of —”.

**plast-** plastic repair; renewal of destroyed, injured or deformed tissue; reforming, reconstruction or restoration of destroyed, injured or deformed body parts

Some examples of plastic repair are:

Correction of congenital (birth) defects such as cleft lip, webbed fingers.  
Cosmetic (beautifying) operations such as face lifts, “nose alterations.”

-plasty (plast/y) — “surgical repair of —”

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**-ology** study of; knowledge of; especially “the science of”; a specialized department of medicine; a specialized field of medical practice

This suffix is used widely in medicine to name the field in which a physician may decide to limit his practice, particularly if he has undergone training and examination in the field.

Examples are:

dermatology (dermat/ology) — the branch of medicine dealing with the skin and its disorders  
pathology (path/ology) — the branch of medicine that deals with the nature of disease

internal medicine — the branch of medicine that deals with the diagnosis and nonsurgical treatment of disease. Within this branch are specialized fields termed subspecialties.

These include:

cardiology (cardi/ology) — the field of medicine dealing with the heart, its functions and its diseases  
nephrology (nephro/ology) — the field of medicine dealing with the kidneys, their functions and their diseases  
gastroenterology (gastr/o/enter/ology) — the field of medicine concerned with disorders of the digestive system. This field may be further divided between the specialties of gastrology and enterology

**-oma** a tumor; a swelling on some part of the body; especially a mass of new tissue growth

Most applications of this suffix have to do with the composition of the tumor, that is, the kind of tissue forming the tumor.

For example:

cerebroma (cerebr/oma) — an abnormal mass of brain tissue  
dermatoma (dermat/oma) — an abnormal growth of skin tissue

Or, the term may describe structural features, such as:

adenoma (aden/oma) — a tumor with a glandlike structure  
angioma (angi/oma) — a tumor which tends to be made up of blood vessels  
blepharadenoma (blephar/aden/oma) — a tumor of the eyelid consisting of glandlike structures;  
a glandular tumor of the eyelid

Or, the term may indicate the location of the tumor, as in hepatoma (hepat/oma).

As you progress through subsequent lessons and learn the roots for other body materials such as blood, cancers, fat, etc., you will discover many more -oma words.

From this discussion we can conclude that the appearance of the suffix **-oma** can usually be interpreted as:

“a tumor composed of —”

“a tumor consisting of —”

“a tumor arising from —”

**-osis** condition or disease; most frequently used to indicate an abnormal or diseased condition; sometimes used in words not relating to disease such as in hypnosis.

Examples:

gastrosis (gastr/osis) — a condition of the stomach  
dermatosis (dermat/osis) — a condition of the skin



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### Examples:

angioplasty (angi/o/plast/y) — plastic repair of a blood vessel  
arthroplasty (arthr/o/plast/y) — plastic repair of a joint  
blepharoplasty (blephar/o/plast/y) — plastic repair of an eyelid  
cardioplasty (cardi/o/plast/y) — plastic repair of the heart  
dermoplasty (derm/o/plast/y) — plastic repair of the skin  
dermatoplasty (dermat/o/plast/y) — plastic repair of the skin  
enteroplasty (enter/o/plast/y) — plastic repair of the intestines  
gastroplasty (gastr/o/plast/y) — plastic repair of the stomach  
gingivoplasty (gingiv/o/plast/y) — plastic repair of the gums  
rhinoplasty (rhin/o/plast/y) — plastic repair of the nose

-plastic (plast/ic) — pertaining to surgical repair

The -plastic suffix combines with all the roots listed under -plasty with the meaning “pertaining to surgical repair.”

**rhin-** the nose

### Examples:

rhinal (rhin/al) — pertaining to the nose (same as nasal)  
rhinoplasty (rhin/o/plast/y) — plastic repair of the nose; rebuilding, reconstruction of or forming the nose  
rhinitis (rhin/itis) — inflammation of the nose (inflammation of the mucous membrane of the nose)  
rhinology (rhin/ology) — the study of the nose  
rhinologist (rhin/ologist) — specialist in the study of the nose

**spasm** involuntary contractions; a sudden, violent, involuntary contraction of a muscle or group of muscles; a sudden but brief constriction of a body passage or opening; a convulsion is a series of severe spasms

### Examples:

Angiospasm (angi/o/spasm) and enterospasm (enter/o/spasm) are examples of body passage spasms.  
Blepharospasm (blephar/o/spasm) is an example of a muscle spasm since it is caused by contraction of the muscle governing movement of the eyelid.