

Glossary

angiосcopy

process of viewing the interior of arteries

hemothorax

blood in the chest cavity

Leukocyte

White blood cell(s)

pathogen

substance or agent that produces disease

psychiatrist

Specialist who studies the mind

testicular

pertaining to the testicles

5.25 liters of blood

The volume of blood ejected by the ventricle in one minute is called the cardiac output

70 mL blood per contraction

The amount of blood ejected from the ventricle in one contraction is called the stroke volume.

basal cell

cuboidal-shaped stem cell

Orchiectomy

Excision of a testicle

Abduction

away from the midline of the body

abduction

Movement away from the mid line of the body

ABG

Arterial blood gas. This test measures blood pH, oxygen and CO₂ levels in a sample of arterial blood, usually taken from the wrist

ablation

Using extreme heat or extreme cold to destroy cells in part of the heart which were causing abnormal rhythms.

acanthosis nigricans

disorder that causes darkening and thickening of the skin on the neck, groin, underarms, or skin folds

acrochordons

skin tags, teardrop-sized pieces of skin that can be as large as raisins and are typically found in the armpits or neck area

acronymns

Terms derived from the first letters of a phrase and are spoken as if they are a word on their own.

adaptive immune response

Specific immune mechanisms (against a specific pathogen) which take time to develop

adduction

Movement toward the midline of the body

adenocarcinoma

Cancer that starts in the mucous glands

adipocytes

fat cells

adipose

fat

adventitial

The outermost layer of the wall of a blood vessel

AIDS

Acquired immunodeficiency syndrome, caused by infection with the HIV virus

allergens

antigens that evoke type 1 hypersensitivity (allergy) responses

alveolar duct

a tube composed of smooth muscle and connective tissue (Betts. et al., 2013)

amenorrhea

absence of periods

amniocentesis

surgical puncture (using a needle) to remove amniotic fluid for sampling.

amniorrhexis

Rupture of the amniotic sac

ampulla

A sac-like enlargement of a canal or duct

anaphylactic shock

Also called anaphylaxis. An inhaled, ingested or injected (bee sting) allergen causes a significant drop in blood pressure along with contractions of smooth muscles of the airways

anastomoses

connections between two blood vessels (singular: anastomosis)

anatomical position

is that of the body standing upright, with the feet at shoulder width and parallel, toes forward. The upper limbs are held out to each side, and the palms of the hands face forward (Betts, et al 2013)

androgens

male hormones

anemia

Lack of (without) sufficient healthy red blood cells in the blood

aneurism

ballooning of a blood vessel caused by a weakening of the wall (DeSaix, et al., 2013)

aneurysm

Weakening of the wall of a blood vessel, causing it to thin and balloon out, and possibly eventually burst, resulting in internal bleeding

angina pectoris

chest pain

angiogram

an x-ray of the coronary blood vessels using a special catheter and an injection of dye

angioplasty

a balloon-tip catheter is fed through a blood vessel up to the site of the narrowing, the balloon is inflated to re-open the artery. A stent is sometimes placed at the site to reinforce the arterial wall and to prevent re-occlusion.

ankylosis

abnormal condition of stiffness

anoxia

without oxygen

antagonistic

in opposition to each other

antepartum

before childbirth

anterior

pertaining to the front

Anteriorly

Pertaining to front

anti-B antibodies

proteins that will mount an immune response against B antigens

anti-virals

treatments that work effectively against a virus.

antiandrogens

a group of medications that counteract the effects of male hormones.

antibiotics

Antibiotics are medications that stop bacterial infections.

Antibodies

also called immunoglobulins, proteins produced by B lymphocytes in response to a non-self antigen

Antigens

A substance that provokes an immune response. This happens because the immune system sees the antigen as foreign, or 'non-self" (does not belong in that body)

antihypertensives

class of medications used to treat high blood pressure

antipsychotic

against (modifying) psychosis

antiretrovirals

treatment that works against the virus replication

apical

Relating to or denoting an apex.

apoptosis

programmed cell death

appendicular

Pertaining to appendages

Arrhythmias

absence of a regular heart rhythm

Arteries

Blood vessels that transport blood away from the heart.

arterioles

A very small artery that leads to a capillary

arteriosclerosis

hardening of arteries

artery

Blood vessel that carries blood away from the heart. Thick walled that can withstand the high pressure of blood ejected from the heart (DeSaix, et al., 2013)

arthralgia

painful joint(s)

Arthritis

Inflammation of the joints

arthrodesis

surgical fusion of a joint through ossification of bones

arthroscope

Instrument that contains a small camera on a tube with a light. This is a tool used to view the inside of a joint.

articulations

Also known as joints. It is where bones meet bones or bones meet joints.

asymptomatic

pertaining to without symptoms

asystole

a complete absence of electrical activity in the heart, which is represented by a flat line on ecg

atherosclerosis

a hardening of the arteries that involves the accumulation of plaque

atypical

not typical

auscultation

listening to the heart using a stethoscope

autocrine

a cell secretes a hormone or chemical messenger.

autoinoculation

self inoculation

autonomic

unconsciously regulates

AV

atrioventricular: the area of the heart where the atria and ventricles meet

AV valves

Atrioventricular valves: mitral (bicuspid) valve allows blood to flow from left atrium to left ventricle, tricuspid valve allows blood to flow from right atrium to right ventricle

avascular

without blood vessels

axilla

armpit

axons

the long threadlike part of a nerve cell along which impulses are conducted from the cell body to other cells.

baroreceptors

specialized cells that sense changes in blood pressure

Barrier defenses

The body's first line of defense against pathogens, a physical barrier to keep pathogens out of the body

Bartholin's glands

Also known as greater vestibular glands they are responsible to secrete mucus to keep the vestibular area moist

benign

noncancerous, harmless

bicarbonate

A by-product of the body's metabolism

bilateral

pertaining to both sides

bilobed

two lobes

binocular

pertaining to two or both eyes

biopsy

process of viewing living tissue to examine for presence, cause or extent of disease

brachial artery

large artery in the upper arm near the biceps muscle

bradycardia

pertaining to a slow heart (rate)

brain**bronchiectasis**

Walls of the bronchi are thickened out (expanded) with inflammation and infection because cilli can no longer sweep out debris leading to dyspnea.

bronchodilators

substance that dilates the bronchi and bronchioles

Bulbourethral

(also, Cowper's glands) glands that secrete a lubricating mucus that cleans and lubricates the urethra prior to and during ejaculation

calyces

a cuplike cavity or structure

Cancer

abnormal cells in the body dividing uncontrollably.

capillaries

A microscopic channel that supplies blood to the tissues through perfusion

carbohydrates

The sugars, starches and fibers found in fruits, grains, vegetables and milk products.

carcinogenic

causing cancer

cardiac

pertaining to the heart

cardiac cycle

The combination of one complete relaxation or filling phase (diastole) and one complete contraction or ejection phase (systole)

cardiac muscle

Is the heart muscle also known as the myocardium. Its appearance is similar to skeletal muscle. It pumps blood and gives the heart beat.

cardiac notch

is an indentation on the surface of the left lung

Cardiac output

Cardiac output is the measurement of blood flow from the heart through the ventricles, and is usually measured in liters per minute. Any factor that causes cardiac output to increase, by elevating heart rate or stroke volume or both, will elevate blood pressure and promote blood flow.

cardiac tamponade

The pericardial sac surrounding the heart has filled with blood or other fluid and the resulting pressure is preventing the heart from beating effectively

cardiac troponin

the regulatory protein for muscle contraction

Cardiogenic

Cardio=pertaining to the heart
genic=originating from, created by
Cardiogenic means originating from the heart

cardiology

Study of the heart

carina

ridge of cartilage that separates the two main bronchi

carotid artery

large artery in the neck

CD4 T cells

CD4 is the receptor that HIV uses to get inside T cells and reproduce. CD4+ helper T cells play an important role in T cell immune responses and antibody responses. (Betts et al., 2013)

celiac disease

Inflammation of the intestines caused by exposure to gluten (<https://www.cdc.gov/ibd/what-is-IBD.htm>)

central nervous system (CNS)

includes the brain and spinal cord

centrifuged

A centrifuge is a common piece of laboratory equipment used to spin test tubes at a high speed in order to separate components in a liquid by weight.

cerebrospinal

Produced by the brain is a colourless fluid that cushions the brain and spinal cord.

cerebrum

region of the adult brain that is responsible for higher neurological functions such as memory, emotion, and consciousness

cervicitis

Inflammation of the cervix

cervix

opening to the uterus

cessation

Stop/stopping

chemoreceptors

cells that sense changes in chemical levels

chemotaxis

Movement in response to chemicals; a phenomenon in which injured or infected cells and nearby leukocytes emit the equivalent of a chemical “911” call, attracting more leukocytes to the site.

cholecystolithotripsy

surgical crushing of stones in the common bile duct

cholecystorrhaphy

suturing of the gall bladder for repair

choledocholithiasis

Condition of stones in the common bile duct

chondromalacia

softening of cartilage

chorionic villus sampling

A small piece of placenta is taken and tested to determine potential for birth differences

chronic

a condition that lasts a long time with periods of remission and exacerbation

chronic inflammation

Chronic inflammation is ongoing inflammation that can be caused by foreign bodies, persistent pathogens, and autoimmune diseases such as rheumatoid arthritis (Betts et al., 2013)

cisterna chyli

A sac-like chamber that receives lymph from the lower abdomen, pelvis, and lower limbs by way of the left and right lumbar trunks and the intestinal trunk. (Betts et al, 2013)

clubbing of the fingers and toes

broadening of the nails and exaggerated curvature of the nails

coelomic

cavities that do not open to the outside

colitis

inflammation of the colon

colpopexy

surgical fixation of the vagina by suturing it to the abdominal wall

combining form

A word root with a combining form vowel.

combining form vowel

The combining form vowel is used to join word parts and to ease pronunciation.

The most common combining form vowel is an "o" but sometimes it is an "i" or an "e".

compliance

the ability of the blood vessels to dilate and constrict as needed

conducting zone

The major functions of the conducting zone are to provide a route for incoming and outgoing air, remove debris and pathogens from the incoming air, and warm and humidify the incoming air. Several structures within the conducting zone perform other functions as well. The epithelium of the nasal passages, for

example, is essential to sensing odors, and the bronchial epithelium that lines the lungs can metabolize some airborne carcinogens (Betts, et al., 2013).

congenital

present at birth

convex

Curved outwards

coronary

pertaining to the arteries that supply the heart

coronary artery bypass graft (CABG)

In a coronary bypass procedure, a non-vital superficial vessel from another part of the body (often the great saphenous vein) or a synthetic vessel is inserted to create a path around the blocked area of a coronary artery.

coronary heart disease

also called coronary artery disease (CAD); the blood vessels that supply blood to the myocardium become hardened and narrowed, impairing the delivery of oxygen to the heart muscle

cranioschisis

Congenital fissure of the skull. The bones of the skull fail to close.

creatine kinase MB

an enzyme that catalyzes the conversion of creatine to phosphocreatine, consuming ATP

Crohn disease

A type of inflammatory bowel disease

Cryptorchidism

Undescended testicle

cryptorchism

undescended testes that don't drop before birth

crypts

Histologically, tonsils do not contain a complete capsule, and the epithelial layer invaginates deeply into the interior of the tonsil to form tonsillar crypts. (DeSaix et al., 2013)

CT

Computerized tomography: a special 3-dimensional x-ray, also called CAT=Computerized Axial Tomography

cyanosis

abnormal condition of blue (bluish colour, lips, and nail beds) caused by deoxygenation.

cyanotic

pertaining to abnormal discolouration of blue (bluish colour, lips and nail beds) caused by deoxygenation.

cytokines

chemical that sends a message from one cell to another

cytoplasm

substance that composes cells

cytotoxic

cell-killing

Deamination

The removal of an amino group from a molecule.

debridement

excision of damaged tissue or foreign object.

deep lymphatic vessels

Lymphatic vessels of the organs

defensins

The lysozyme enzyme and proteins which have antibacterial properties (Betts, et al., 2013)

dehydrate

lose a large amount of water from the body

dehydration

loss of fluids/water is greater than what is taken in.

dendritic

Pertaining to dendrites

dermatologic

pertaining to dermatology

dermatome

instrument used to cut skin

dermatopathology

Study of diseases of the skin.

dermis

The layer that is made of dense, irregular connective tissue that houses blood vessels, hair follicles, sweat glands, and other structures

detrusor

A muscle which forms a layer of the wall of the bladder

diabetes mellitus

An endocrine system disorder in which the pancreas does not produce insulin or the cells of the body do not respond to insulin. This results in high levels of glucose in the blood.

dialysis

The process of removing substances, purifying, adding, and then returning the purified substance.

An example is hemodialysis, blood is removed from an artery, purified through dialysis, vital substances added, and then the blood is returned through a vein.

diapedesis

dia- = "through"; -pedan = "to leap"

diaphoresis

sweating

diaphragm

A flat, dome shaped muscle located at the base of the lungs and thoracic cavity

diastolic pressure

The diastolic pressure is the lower value (usually about 80 mm Hg) and represents the arterial pressure of blood during ventricular relaxation, or diastole.

diplopia

double vision

distal

Away from the center of the body or from the point of attachment

diuresis

Condition of increased production of urine

dorsad

toward the back

douching

washing the vagina with fluid

ductus arteriosus

connection between pulmonary trunk and aorta in the fetal heart

dysmenorrhea

painful periods

dyspareunia

painful intercourse

dyspepsia

difficult digestion

dysphagia

difficulty swallowing

dyspnea

difficult breathing

dystocia

difficult birth

dysuria

painful urination

ECG

ECG/EKG both these abbreviations mean electrocardiogram or a recording of the electrical impulses in the heart

echocardiography

process of using sound to record the heart

edema

swelling

electrocardiogram

radiographic image of electrical activity in the heart

electrocardiograph

instrument used to record electrical activity within the heart

electrocardiography

process of recording electrical activity of the heart

electrophysiology

The study of electrical properties of cells and tissues

eleiden

clear protein rich in lipids

embolus

a freely moving piece of a substance (plaque or blood clot) that travels through the circulation until it blocks a smaller blood vessel, cutting off the supply of oxygen to the tissue

emulsification

The process of breaking down the fat into smaller blood cells which makes it easy for enzymes to function and digest food.

endocardium

innermost layer of the heart

endocrinology

The study of endocrine glands and hormones

endometrium

The innermost layer containing a connective tissue lining covered by epithelial tissue that lines the lumen. Provides the site of implantation for a fertilized egg
Sheds during menstruation if no egg is fertilized.

endoscopy

Process of viewing internally

endothelium

the lining of the lumen of a blood vessel

endotracheal

pertaining to within the trachea

epidermis

outer layer of skin, made of closely packed epithelial cells

epididymal

Pertaining to the epididymis

epididymis

(plural = epididymides) coiled tubular structure in which sperm start to mature and are stored until ejaculation

Epididymitis

swelling of the epididymis

epiglottis

The epiglottis, attached to the thyroid cartilage, is a very flexible piece of elastic cartilage that covers the opening of the trachea (Betts. et al., 2013)

epinephrine

also known as adrenaline, is a hormone and neurotransmitter and produced by the adrenal glands

epiphyses

the ends of long bones, singular is epiphysis

EPO

Erythropoietin is a hormone produced by the kidneys that plays an important role in the homeostasis of red blood cells levels in the body

eponyms

Terms that are named after a place or person.

equilibrium

balance

erythroblastosis fetalis

HDN: Hemolytic Disease of the Newborn. Discussed in the chapter about Blood, this is an immune reaction between maternal and fetal blood due to the Rh antigen.

erythrocytes

red blood cells

erythrocytopenia

abnormal reduction in number of (healthy) red blood cells produced

erythrocytosis

abnormal condition of excessive production of red blood cells

esophageal

Pertaining to the esophagus

eupnea

normal breathing

exacerbation

increase in severity of a problem

excises

remove by cutting out

excretion

Waste is eliminated from an organism. In vertebrates this is primarily carried out by the lungs, kidneys and skin.

exocrine

to secrete externally, directly or through a duct

exocytosis

Molecules are transported out of cells. A form of active transport

expiration

exhalation or the process of causing air to leave the lungs

external nose

The external nose consists of the surface and skeletal structures that result in the outward appearance of the nose and contribute to its numerous functions

extramedullary hemopoiesis

hemopoiesis outside the medullary cavity of adult bones

fascia

fibrous tissue

fauces

The **fauces** is the opening at the connection between the oral cavity and the oropharynx

fibroelastic membrane

a flexible membrane that closes the posterior surface of the trachea, connecting the C-shaped cartilages

fibromyalgia

pain in the fibrous tissues of muscles

filler

additional words that makes the definition complete.

foramen ovale

opening between right and left atria, which is normal in the fetal heart

fornix

superior portion of the vagina

frostbite

Conservation of the body core heat results in the skin actually freezing

fundus

A part of a hollow organ

Gametes

haploid reproductive cells that contribute genetic material to form an offspring

gastrectomy

surgical removal of (part or all of) the stomach.

gastromegaly

enlarged stomach

gastroscopy

process of viewing the stomach

Genetic recombination

the combining of gene segments from two different pathogens

glossopharyngeal

pertaining to tongue and throat

glottis

The glottis is composed of the vestibular folds, the true vocal cords, and the space between these folds (Betts et al, 2013)

gonads

reproductive organs (testes in men and ovaries in women) that produce gametes and reproductive hormones

graft-versus-host disease

GVHD: in bone marrow transplants; occurs when the transplanted cells (the 'graft') mount an immune response against the recipient's (the 'host') tissue

great vessels

The great vessels include the superior vena cava, inferior vena cava, aorta and pulmonary trunk.

gynecologist

Specialist in the study and treatment of the female reproductive system

gynecology

The study of the female reproductive system

Gynecomastia

growth in the breasts

hard palate

located at the anterior region of the nasal cavity and is composed of bone

HDL

high-density lipoprotein, often referred to as 'good' cholesterol

heart murmur

an abnormal heart sound

heart rate

The number of times the heart contracts in one minute.

hematemesis

The vomiting of blood

hematocrit

A lab test which measures the percentage red blood cells in a sample of whole blood. It represents how much of the person's blood is made up of red blood cells, by volume.

hematopoiesis

The process in which the body produces blood.

hemicolectomy

excision of half of the colon

hemiparesis

slight paralysis of one side of the body (right or left)

Hemolysis

Breaking apart of the erythrocyte cell membrane, allowing its contents to leak out

hemopoiesis

also called hematopoiesis; from the Greek root haima- = "blood"; -poiesis = "production"

hemopoietic growth factors

Chemical messengers which promote the proliferation and differentiation of formed elements and include erythropoietin, thrombopoietin, colony-stimulating factors, and interleukins.

hemorrhage

excessive or uncontrolled bleeding from the blood vessels

hemostasis

the process by which the body seals a ruptured blood vessel to prevent further blood loss

hiatal

Location where the diaphragm has a small opening (hiatus) through which the esophagus passes before connecting.

hilum

A concave region where blood vessels, lymphatic vessels, and nerves also enter the lungs

hirsutism

excess hair all over the body

histamine

Involved in the inflammatory response and typically causes itching.

HIV

Human Immunodeficiency Virus. An infectious disease, usually transmitted via blood or sexual fluids. It attacks the immune system and can lead to full-blown AIDS

homeostasis

biological process that results in stable equilibrium

hydrocele

swelling of the scrotum cause by fluid collection in the sheath surrounding the testicle

Hydrostatic

Relating to the equilibrium of liquids and the pressure exerted by liquid at rest.

hypercholesterolemia

higher than normal levels of cholesterol in the blood

hyperlipidemia

Excessive fat in the blood

hyperplasia

excessive development or growth

hyperpnea

forced breathing or breathing that is excessive

hypersensitivities

Reacting to something that would not normally evoke a reaction

hypertension

High blood pressure

hyperthyroidism

state of excessive production of thyroid hormone

hypertrophy

excessive development; increase in the size of cells but not the number of cells

hypodermis

Literally means below the dermis. The layer of the skin below the dermis that is composed mainly of loose connective and fatty tissues

hypoglycemia

deficient sugar in the blood

hypothalamic

a region of the forebrain below the thalamus

hypothalamus

a collection of nucleic nerve tissue - has function in both the autonomic and endocrine systems - regulates homeostasis

hypothyroidism

Underactive thyroid gland, insufficient production of thyroid hormones (T3 and T4)

Hypovolemic

hypo=below, lower than normal, volemic=pertaining to volume (in this case, the volume of blood in the body)

hypoxemia

low blood oxygen levels

hypoxia

literally: 'lower than normal amount of oxygen to tissues'. Hypoxia means that a tissue is not getting enough oxygen to survive and cell death is likely.

hysterectomy

Surgical removal of the uterus

hysteroscope

instrument used to visualize the uterus

immunity

After an infection, memory cells remain in the body for a long time and can very quickly mount an immune response against the same pathogen if it tries to re-infect. This protects us from getting diseases from the same pathogen over again.

implantable cardioverter defibrillators

ICD, an electronic implant that provides an automatic shock to convert a dangerous heart rhythm to a normal heart rhythm

induration

a firm, raised reddened patch of skin

infarct

cells and tissues that have died, often due to a complete disruption in the blood and oxygen supply

infection

invasion by disease causing organisms

inferior

pertaining to below

inferior vena cava

One of the two largest veins in the body. It carries deoxygenated blood from the torso and legs back to the heart.

innate immune response

Fast-acting non-specific immune mechanisms that are present from birth

Inspiration

inhalation or process of breathing air into the lungs

interatrial septum

the wall separating the right and left atria.

Intercellular

Between cells

intercostal

pertaining to between the ribs

interferons

Early induced proteins made in virally infected cells that cause nearby cells to make antiviral proteins (Betts et al., 2013)

internal nose

nasal cavity

Interstitial

Between cells of the tissues, often used interchangeably with 'intercellular'

interstitial fluid

Fluid that has leaked out of blood capillaries into the tissue spaces

interstitial space

Spaces between individual cells in the tissues (Betts et al., 2013)

interventricular septum

The wall of myocardium that separates the right and left ventricles

Intracellular

Inside the cell membrane or within the cell

intramuscular

pertaining to within the muscle

intravenous

pertaining to within the vein

ischemia

Insufficient blood and oxygen to cells of an organ. These cells are starving for oxygen, but they are still alive.

ischemic

ischemia is a condition in which cells receive insufficient amounts of blood and oxygen

jaundice

yellowing

jaundiced

Yellow coloured

Juvenile Rheumatoid Arthritis

Rheumatoid Arthritis that affects children causing swelling and stiffness of the joints. Also referred to as juvenile idiopathic arthritis.

keloid

formation of a raised or hypertrophic scar

keratinocytes

cells that manufacture and store the protein keratin

kinesthesia

body movement

labia

lips of the mouth

lacteals

The lymphatic vessels of the small intestine which absorb digested fats

laparoscopy

process of viewing internal organs

laparotomy

incision into the abdominal cavity

laryngeal

pertaining to the larynx

laryngopharynx

which borders the oropharynx, trachea, and esophagus (De Saix, et al., 2013)

larynx

The larynx is a cartilaginous structure inferior to the laryngopharynx that connects the pharynx to the trachea and helps regulate the volume of air that enters and leaves the lungs (Betts. et al., 2013) AKA the voice box

lateral

pertaining to the side

LDL

low-density lipoprotein, often referred to as 'bad' cholesterol

lethargy

Periods of weakness

leukemia

A cancer involving an abundance of leukocytes. It may involve only one specific type of leukocyte from either the myeloid line (myelocytic leukemia) or the lymphoid line (lymphocytic leukemia). In chronic leukemia,

mature leukocytes accumulate and fail to die. In acute leukemia, there is an overproduction of young, immature leukocytes. In both conditions the cells do not function properly (Betts, et al., 2013)

leukocytes

also spelled leucocyte, these are white blood cells

leukoderma

white skin

leukopoiesis

formation of white blood cells

lingual

pertaining to the tongue

lingual tonsils

collection of lymphatic tissue located in the lamina propria of the root of the tongue

lipoid

resembling fat

literally

follows the rules exactly

lumbago

lower back pain

lumen

A hollow passageway through which blood flows

lupus

An autoimmune disease in which the body mounts an immune response against its own tissues, causing chronic inflammation and tissue damage

Lymph

Lymph is the term used to describe interstitial fluid once it has entered the lymphatic system (Betts et al., 2013)

lymphatic system

A series of vessels, tissues and organs that remove interstitial fluid from the tissues and return it the blood, transport dietary lipids and carry out several important immune functions (DeSaix et al., 2013)

lymphatic trunks

Large lymphatic vessels that collect lymph from smaller lymphatic vessels and empty it into the blood via lymphatic ducts (Betts et al., 2013)

lymphocytes

lymph cells, a type of white blood cell

lymphoid

Resembling lymph or lymphatic tissues

Lymphoma

Lymphoma is a form of cancer in which masses of malignant T and/or B lymphocytes collect in lymph nodes, the spleen, the liver, and other tissues. These leukocytes do not function properly, and the patient is vulnerable to infection. (Betts. et al., 2013)

macrocephalous

pertaining to an exceptionally large head or cranium

macrophage

A type of white blood cell that engulfs bacteria, foreign particles and damaged cells

macrophages

a type of leukocyte (usually a monocyte) that has the ability to ingest and destroy other cells or pathogens

malabsorption

A disorder that occurs when people are unable to absorb nutrients from their diets

maldigestion

Poor breakdown of food

malignant

cancerous

mammoplasty

surgical repair of the breast particularly after a mastectomy

mastectomy

Excision of breast(s) and or breast tissue

mechanoreceptors

A sensory neuron that responds to mechanical pressure

medulla

An inner region of specific structure such as the kidneys

medulla oblongata

A part of the brain stem responsible for control of heart rate and breathing.

Meissner corpuscle

tactile corpuscle that responds to light and touch, touch receptor

Meissner corpuscles

Tactile corpuscles that responds to light and touch, touch receptors.

melanocyte

cell that produces the pigment melanin

melanocytes

Specialized cells that produce melanin which is a dark pigment responsible for colouration of skin and hair.

melanoma

tumour that develops in the melanocytes

mental disorder

A behaviour or mental pattern causing impairment of functioning.

mental health

mental health encompasses, psychological, emotional, and social well being

metacarpal bones

The bones that extend beyond the carpal bones of the wrist but before the phalanges of the fingers.

metastasis

Cancer spreads from one part of the body into another

metastasize

Production of cells that can mobilize and establish tumors in other organs of the body

metastasized

cancer spreads from one area to another area

MHC

Major Histocompatibility Complex molecules, also called Human Leukocyte Antigen (HLA) are protein structures found on the outside of cells that help the immune system recognize non-self antigens

microcephalus

small head

microscope

instrument to view small particles by enlarging the particles

mitochondria

An organelle found in large numbers in most cells.

mitral valve

Also known as the bicuspid valve

modern language terms

Terms from the English language.

MRI

Magnetic Resonance Imaging: Highly detailed images produced using a strong magnet and radio waves

Mucosal

Mucous membranes line body cavities that open to the outside world, including the respiratory tract, gastrointestinal tract, urinary tract and reproductive tracts

multipara

many births, refers to a woman who has birthed two or more live babies

Muscular Dystrophy

It is a term used to describe a group of more than 100 neuromuscular disorders characterized by progressive deterioration of muscle strength.

myalgia

pain in the muscles

myasthenia gravis

grave or serious muscle weakness

nasal cavity

The inside of your nose.

nasopharynx

The nasopharynx serves as an airway and is continuous with the nasal cavity

necrosis

tissue death

neonate

new birth/ newborn - birth to four weeks.

nephroptosis

prolapsed kidney

nephrostomy

creation of artificial opening between the kidney and the skin

nerves

Collection of neurons; nerve cells

Neurosensory

Relating to afferent nerves

neurotransmitter

chemicals acting as signaling molecules that enable neurotransmission.

neurotransmitters

Chemical messengers which transmit signals across a chemical synapse from one neuron to another neuron/nerve cell.

nociceptors

Sensory neurons that respond to pain

nocturia

Urinating at night (usually excessive)

nomenclature

naming conventions

norepinephrine

A natural chemical in the body that acts as both a stress hormone and neurotransmitter (a substance that sends signals between nerve cells). It's released into the blood as a stress hormone when the brain perceives stress.

nulligravida

no pregnancies

obstetrician

Specialist in obstetrics

occlusion

blocked/blockage

olfaction

sense of smell

oligohydramnios

less than expected (amount) of amnion fluid

oligomenorrhea

Infrequent or irregular periods

omentum

Fatty tissue that stretches over the abdomen, plays a role in immune response and the growth of certain cancers

oncologist

Specialist who studies and treats cancer

oocyte

female gamete

oophorectomy

surgical removal of the fallopian/uterine tubes

ophthalmoplegia

paralysis of eye muscle(s)

opsonization

An antibody or an antimicrobial protein binds to a pathogen, thereby marking it as a target for phagocytes.

orchiectomy

Excision/removal of the testicle.

oropharynx

The oropharynx is a passageway for both air and food and borders the nasopharynx and the oral cavity (Betts, et al., 2013)

osmolarity

the concentration of a solution

Osmosis

A process by which molecules of a solvent tend to pass through a membrane from a less concentrated solution into a more concentrated one.

osteoarthritis

Inflammation of bones and joints

osteomalacia

Softening of the bone(s)

osteoporosis

abnormal condition of bones that are porous.

otalgia

Pain in the ear

otitis externa

Inflammation of the external ear. Aka. swimmer's ear.

otitis media

inflammation of the middle ear

ovaries

female gonads

pacemaker

An electronic implant that initiates a heart beat

pachyderma

thick or thickened skin

Pacinian corpuscle

lamellated corpuscle that responds to vibration

palatine tonsils

a pair of soft tissue masses located at the rear of the throat (pharynx)

palpations

A feeling in the chest that may be caused by an irregular heart rhythm

pancytopenia

abnormal reduction or deficiency in all blood cell types

papillary layer

underlying dermal layer

paracrine

relating to or denoting a hormone which has effect only in the vicinity of the gland secreting it

parasympathetic

rest and relaxation phase

parathyroid glands

four small endocrine glands that are located beside the thyroid gland

pathogens

disease causing agents

pelviscopic

visual examination of the pelvis

percutaneous

pertaining to through the skin

perfusion

The delivery of blood to an area/tissue/organ

pericardial fluid

pericardial fluid is a serous fluid which allow the 2 layers of serous pericardium to slide smoothly against each other as the heart beats

peripheral arterial disease

obstruction of vessels in peripheral regions of the body

peripheral nervous system (PNS)

all nervous tissue that is outside of the brain and spinal cord

peripheral vision

pertaining to the outer sides of the field of vision

permeability

membrane that causes it to allow liquids or gases to pass through it.

pH

pH is a measure of how acidic or alkaline a substance is, as determined by the number of free hydrogen ions in the substance.

phagocytes

Cells that engulf and absorb bacteria and cell particles

phagocytized

also phagocytosed, this is the process by which certain cells are able to 'eat' other cells or substances by engulfing them

pharyngeal

pertaining to the pharynx

pharyngeal tonsils

A pharyngeal tonsil, also called an adenoid, is an aggregate of lymphoid reticular tissue similar to a lymph node that lies at the superior portion of the nasopharynx (De Saix, et al., 2013)

pharynx

The pharynx is a tube formed by skeletal muscle and lined by mucous membrane that is continuous with that of the nasal cavities (Betts, et al., 2013). Also known as the throat.

photophobia

Aversion or sensitivity to light

placenta

the organ of gas and nutrient exchange between the baby and the mother

plaque

a fatty material including cholesterol, connective tissue, white blood cells, and some smooth muscle cells

plasma cells

A type of B lymphocyte that produces antibodies which bind to specific foreign or abnormal antigens, in order to destroy them

plasmapheresis

Process that removes antibodies from the plasma portion of blood

platelets

Blood clotting cells also called thrombocytes.

pneumothorax

An excessive amount of air is present in the thoracic cavity, outside of the lungs, putting pressure on the lungs and interfering with venous return, pulmonary function, and delivery of oxygen to the tissues

polycythemia

a disorder in which too many red blood cells are produced

polycythemia vera

A type of bone marrow disease that causes an excessive production of immature erythrocytes

polymenorrhea

excessive bleeding during one's period

polymyositis

inflammation of many muscles at one time

polyneuropathy

disease of many nerves

polyuria

frequent urination

posterior

pertaining to behind

posteriorly

pertaining to behind

postictal

After a seizure

postnatal

Pertaining to after birth

postpartum

after birth

prefix

Word part at the beginning of a medical term that changes the meaning of the word root.

prenatal

before birth

primary lymphoid organs

Bone marrow and thymus gland.

prognosis

knowledge beforehand. For example stating what the expected outcome is before all the tests are in

proliferate

reproduce rapidly

proliferation

rapid increase in numbers.

prone

face-down

proprioception

body movement

prostaglandins

Any of a group of compounds with varying hormone-like effects.

prostate gland

doughnut-shaped gland at the base of the bladder surrounding the urethra and contributing fluid to semen during ejaculation

proximal

situated nearer to the center of the body or the point of attachment

pseudocyesis

false pregnancy (patient has signs and symptoms of pregnancy but is not pregnant)

pseudostratified

Consisting of closely packed cells which appear to be arranged in layers.

psychiatry

Specialty of the mind

Psychology

The study of human behaviour to understand how humans interact with their physical environment.

puerperium

Time directly after childbirth

pulmonary artery

artery that arises from the pulmonary trunk

pulmonary embolism

A piece of a blood clot or other substance has broken free from its original location and traveled through the bloodstream to lodge in a smaller vessel in the lungs. This causes an obstruction in that vessel and hypoxia to the tissues supplied by that vessel.

pulmonary trunk

very large artery referred to as a trunk, a term indicating that the vessel gives rise to several smaller arteries

pyloric sphincter

A band of smooth muscle at the junction between the pylorus of the stomach and the duodenum of the small intestine

pyosalpinx

Fallopian tube fills with pus

quadrate

A square or rectangular.

rebels

word parts that do not fit within the language rules

renal papillae

The apex of the renal pyramid

renal pyramids

Renal pyramids are kidney tissues that are shaped like cones.

respiratory zone

the respiratory zone includes structures that are directly involved in gas exchange (Betts, et al., 2013)

reticulated

net like

rhabdomyosarcoma

malignant cancer of the skeletal muscles

rheumatoid arthritis

An autoimmune disorder in which the body mounts an immune response against its own joint tissues, causing inflammation and damage to the joints

rhinoplasty

surgical repair of the nasal cavity

rhinorrhagia

Excessive bleeding from the nasal cavity (nose bleed) also called epistaxis

rhinorrhea

excessive flow or discharge from the nasal cavity (runny nose)

rickets

A painful condition in children where bones are misshapen due to a lack of calcium, causing bow leggedness

roots of the great vessels

The part of each great vessel (aorta, pulmonary trunk, inferior vena cava, superior vena cava) that connects to the base of the heart

S. aureus

Staphylococcus aureus is a bacteria that is commonly found in minor skin infections, as well as in the nose of some healthy people

scar

collagen-rich skin formed after the process of wound healing that differs from normal skin

SCID

Severe combined immunodeficiency disease. Patients have essentially no adaptive (specific) immune system due to genetic defects which affect B cells and T cells

sclera

the white of the eye

scrotum

external pouch of skin and muscle that houses the testes

semen

ejaculatory fluid composed of sperm and secretions from the seminal vesicles, prostate, and bulbourethral glands

seminiferous tubules

tube structures within the testes where spermatogenesis occurs

septal cartilage

the flexible portion you can touch with your fingers (Betts, et al., 2013)

seroconversion

Seroconversion is the reciprocal relationship between virus levels in the blood and antibody levels. As the antibody levels rise, the virus levels decline, and this is a sign that the immune response is being at least partially effective. Partially, because in many diseases, seroconversion does not necessarily mean a patient is getting well.(Betts et al., 2013)

serous

You may recall that serous membranes throughout the body are folded back on themselves, which results in a double-layered membrane separated by serous fluid. The serous membrane surrounding the lungs is called pleura, The serous membrane surrounding the abdominopelvic organs is called peritoneum.

sickle cell disease

Also called sickle cell anemia: A genetic disorder involving the production of an abnormal type of hemoglobin which delivers less oxygen to tissues and causes erythrocytes to assume a sickle (or crescent) shape

silent disorder

a disease or disorder that often lacks signs or symptoms

silent MIs

A myocardial infarction without symptoms. The patient may not know that they are having an MI.

sinus rhythm

This is the rhythm set by the heart's pacemaker, the sinoatrial node and is usually approximately 60-90 beats per minute in a resting adult.

skeletal muscle

Also known as striated muscles. Skeletal muscles are responsible for voluntary muscle movement.

smooth muscle

Also known as visceral muscles. Smooth muscle is mainly associated with the walls of internal organs. Smooth muscles are responsible for involuntary muscle movement.

soft palate

located at the posterior portion of the nasal cavity and consists of muscle tissue

solute

the minor component in a solution

sperm

male gamete (spermatozoon)

Spermatogenesis

Process of producing sperm

spermatogonia

diploid precursor cells that become sperm (singular = spermatogonium)

sphygmomanometer

a blood pressure cuff attached to a measuring device, or gauge

spirometry

Process of measuring the function of the lungs by measuring inhalation and exhalation of breath

stratified squamous epithelium

Cells arranged in layers upon a basal membrane

stratum basale

deepest layer of the epidermal

stratum lucidum

smooth translucent layer of the epidermis

subcutaneous

pertaining to below the skin

suffix

A word part added to the end of a word that changes the meaning of the word root.

superficial lymphatics

lymphatic vessels of the subcutaneous tissues of the skin

superior

pertaining to above

superior vena cava

One of the two largest veins in the body. It carries deoxygenated blood from the head and upper extremities back to the heart.

superiorly

pertaining to below

supine

face up

suprascapular

pertaining to above the scapula

sympathetic

flight or fight response

sympathetic nervous system

fight or flight responses

symphysis

growing together

syncope

fainting

syndrome

A group of symptoms that occur (run together) that are associated with a specific disease or pathology.

synthesis

the production of chemical compounds by reaction from simpler materials.

systemic lupus erythematosus

SLE is an autoimmune disease in which the immune system recognizes its own cell antigens as being "non-self" and mounts an immune response against them. As a result, many body tissues and vital organs become chronically inflamed and damaged. (<https://www.cdc.gov/lupus/facts/detailed.html#sle>)

systolic pressure

The systolic pressure is the higher value (typically around 120 mm Hg) and reflects the arterial pressure resulting from the ejection of blood during ventricular contraction, or systole.

tachycardia

condition of a fast heart (rate)

teratogen

Substance or agent that produces or causes malformations

testes

male gonads (singular = testis)

testicle

male gonad (testes=plural)

testitis

Inflammation of the testicles

thalassemia

An inherited condition typically occurring in individuals from the Middle East, the Mediterranean, African, and Southeast Asia, in which maturation of the RBCs does not proceed normally. The most severe form is called Cooley's anemia.

thermometer

instrument used to measure temperature

thermoreceptors

specialized neurons that respond to changes in temperature

thrombocytes

also called platelets, these are cell fragments that aid in blood clotting

thrombocytosis

A condition in which there are too many platelets

thrombolysis

dissolution of a blood clot

thrombosis

formation of unwanted blood clots

thymic involution

shrinking of the thymus due to age

thymocytes

lymphocytes that develop into T-cells in the thymus gland

tissue rejection

Also called organ rejection. The recipient's immune system recognizes the transplanted tissue, the graft, as non-self and mounts an immune response against it, ultimately destroying it.

tissue typing

The determination of MHC molecules in the tissue to be transplanted to better match the donor to the recipient

trachea

The trachea (windpipe) extends from the larynx toward the lungs

transdermal

pertaining to across the skin

triceps

Arm muscle has three attachment points (lateral, medial and long) that join the humerus and scapula to the ulna

tympanic membrane

ear drum

umami

Umami is a Japanese word that means delicious taste, and is often translated to mean savory

unilateral

pertaining to one side

ureterostenosis

constriction or narrowing of the ureter

urethritis

inflammation of the urethra

uvula

The uvula is a small bulbous, teardrop-shaped structure located at the apex of the soft palate (Betts, et al., 2013)

vaccine

A vaccine is a killed or weakened pathogen or its components that, when administered to a healthy individual, leads to the development of immunological memory (a weakened primary immune response) without causing much in the way of symptoms (DeSaix et al., 2013)

valve

specialized structure that ensures one-way flow of blood

vas deferen

(also, ductus deferens) duct that transports sperm from the epididymis through the spermatic cord and into the ejaculatory duct; also referred as the vas deferens

vas deferens**vasa vasorum**

literally means vessels of vessels

vascularized

has numerous blood vessels

vasoconstrict

The smooth muscle layer in the blood vessel wall contracts, causing the vessel diameter to narrow. This increases blood pressure in the vessel.

vasodilate

The smooth muscle layer in the wall of the blood vessel relaxes, allowing the vessel to widen. This decreases blood pressure in the vessel.

vasospasm

blood vessels contract involuntarily (vasoconstriction) resulting in restricted blood flow

vein

A blood vessel that conducts blood toward the heart. In comparison to an artery a vein is thin-walled with irregular lumen (DeSaix, et al., 2013)

veins

Blood vessels that carry blood back to the heart.

venous stasis

blood in the veins, particularly in the legs, remains stationary for long periods

venules

Extremely small vein

Vessel Compliance

Compliance is the ability of any compartment to expand to accommodate increased content. The greater the compliance of an artery, the more effectively it is able to expand to accommodate surges in blood flow without increased resistance or blood pressure.

visceral

pertaining to internal organs

Viscosity

Viscosity is the thickness of fluids that affects their ability to flow

visual acuity

sharpness of vision

vitro fertilization

assisted reproductive technology

Voiding

Excrete (waste matter)

wheal and flare response

a soft, pale swelling at the site surrounded by a red zone (Betts et al., 2013)

word root

the foundational meaning of a word.

zygote

Process of fertilization is complete and results in a single-celled diploid zygote with all the genetic instructions it needs to develop into a human.