

1-front

A

B

C18  
Agglutination

C19  
Angina pectoris

C20  
Atherosclerosis

C20  
Arteriosclerosis

C21  
Autoimmune disease

C19  
Carotid body

20  
Compliance

C21  
Diapedesis

C21  
Inflammation

C20  
Embolus

<p>Medical term for chest pain or discomfort due to coronary heart disease. It occurs when the heart muscle doesn't get as much blood as it needs.</p>	<p>Agglutination is the clumping of particles. Occurs if an antigen is mixed with its corresponding antibody. This term is commonly used in blood grouping.</p>
<p>Follows atherosclerosis as soft plaque of arteriole wall hardens with calcium phosphate salt.</p>	<p>A build up of cholesterol plaque (soft plaque) in the walls of arteries causing obstruction of blood flow.</p>
<p>Chemoreceptors located in the adventitia, near the fork (bifurcation) of the carotid artery (which runs along both sides of the throat).</p>	<p>Your immune system attacks healthy cells in your body by mistake.</p>
<p>The passage of blood cells through the intact walls of the capillaries, typically accompanying inflammation.</p>	<p>The veins are said to be compliant because if you keep increasing the volume of blood in the veins, their walls will distend allowing for more blood to be accommodated.</p>
<p>a blood clot, air bubble, piece of fatty deposit, or other object which has been carried in the bloodstream to lodge in a vessel and cause an embolism.</p>	<p>Body's way of protecting itself from infection, illness, or injury. Response produces white blood cells, immune cells, and cytokines that help fight infection.</p>

2 front

A

B

C20  
Thrombus

C18  
Erythropoiesis

C18  
Hematocrit

C18  
Heparin

C18  
Histamine

C18  
Hypoxia

C18  
Hypoxemia

C18  
Leukemia

C21  
Lymphedema

C19  
Murmur

the production of red blood cells.

A thrombus is a blood clot that forms in a vein. It adheres to the wall of the vein until it breaks away to form an embolus

medication and naturally occurring glycosaminoglycan. As a medication it is used as an anticoagulant.

blood test that measures the volume percentage of red blood cells in blood. It is normally 45%

Hypoxia is a condition in which the body or a region of the body is deprived of adequate oxygen supply at the tissue level.

a compound which is released by cells in response to injury and in allergic and inflammatory reactions, causing contraction of smooth muscle and dilation of capillaries.

Leukemia is cancer of the body's blood-forming tissues, including the bone marrow and the lymphatic system. Over production of WBC

Hypoxemia is an abnormally low level of oxygen in the blood. More specifically, it is oxygen deficiency in arterial blood.

A murmur is an unusual noise the heart makes other than the "lub-DUB" we're familiar with.

refers to swelling that generally occurs in one of your arms or legs. Lymphedema is most commonly caused by the removal of or damage to your lymph nodes as a part of cancer treatment

3 front

A

B

C20  
Stroke

C19  
Myocardial infarction

C20  
Ischemia

C19  
Pacemaker

C22  
Pleurisy

C20  
Pulse

C22  
Surfactant

C21  
Complement

C21  
Cytotoxic T cell

C21  
Plasma cell

Heart attack, occurs when a blood clot blocks blood flow to the heart. Tissue loses oxygen and dies. Symptoms tightness or pain in the chest, neck, back, or arms, as well as fatigue,

A stroke is a “brain attack”. It can happen to anyone at any time. It occurs when blood flow to an area of brain is cut off.

Sets rhythm of cardiocyte because cells can not maintain a resting membrane potential and sodium ions leak into the cell

Bood flow (and thus oxygen) is restricted or reduced in a part of the body. May result in infarction.

Represents the tactile arterial palpation of the heartbeat by trained fingertips. Palpated in any place that allows an artery to be compressed near the surface of the body,

Serous membranes that lines the inner side of the chest cavity and a layer of tissue that surrounds the lungs becomes inflamed.

Complement is a part of the immune system, enhances the ability of antibodies and phagocytic cells to clear microbes and damaged cells from an organism.

Substance which tends to reduce the surface tension of a liquid in which it is dissolved.

Activated B cells form plasma cells that make antibodies matched to foreign antigen in the fluids of the body.

Is a T lymphocyte that specifically recognizes and kills infected cells then leaves memory T cells

4 front

A

B

C21  
Vaccination

C21  
Stress

C22  
Alveoli

C22  
Carbonic anhydrase

C21  
Adaptive immunity

C21  
Innate immunity

C21  
Non specific resistance

C19  
Baroreceptor

C18  
Hemostasis

C21  
Natural killer cell

Stress is a response to any condition that upsets homeostasis. It is not a disease but makes all diseases worse. Stress if not stopped will kill.

Vaccine to help the immune system develop protection from a disease. Vaccines contain a microorganism or virus in a weakened or killed state, or proteins or toxins from the organism.

Enzyme required to join water and carbon dioxide to form carbonic acid

any of the many tiny air sacs of the lungs which allow for rapid gaseous exchange. At end of bronchiole tree.

Part of your immune system functional at birth. Characterized by non-specific resistance to infections.

Part of your immune system that uses T cells and B cells. Key characteristic is specificity and memory. Develops only after birth.

Receptors in carotid arch and aortic arch able to sense changes in blood pressure

Part of your immune system associated with the first and second line of immune defenses. Innate mechanisms.

Part of the non-specific resistance immunity // immune surveillance // kills host cells infected with virus and cancer

Complex mechanism occurs in three stages to stop the flow of blood from small blood vessel (muscular spasm - platelet plug formation - clot formation)



C21 Pyrogen	C21 Lymphatic cells
C21 Lymphatic tissue	C21 Lymphatic organ
C21 Interferons	C21 Cellular Immunity
C21 Humoral Immunity	C21 Antibodies
C21 Memory cells	C21 Interleukin

<p>Collection of nomadic white blood cells working together to provide humoral and adaptive immunity.</p>	<p>Molecule produced by WBC and bacteria to increase body temperature by binding to receptors in hypothalamus</p>
<p>Surrounded by connective tissue capsule and contains high concentration of lymphatic cells.</p>	<p>Nomadic WBC come together to resist localized infection and then disperse after threat eliminated. Not surrounded by connective tissue.</p>
<p>Type of adaptive immunity able to kill cells infected with pathogen. Use cytotoxic-T-cells, helper-T-cells, and produce memory cells for future protection.</p>	<p>An anti-viral molecule produced by cells after they are infected by a virus. Unable to save infected cell but signals other cells to initiate anti-viral strategies.</p>
<p>Protein molecules made by plasma cells. Antibodies are specifically matched to foreign antigen. Antibodies bind to pathogen's antigen to make pathogen harmless and tag them for destruction</p>	<p>Type of adaptive immunity able to recognize pathogens outside of cells so it can render the pathogen harmless and tag them for destruction by using antibodies.</p>
<p>any of a class of glycoproteins produced by leukocytes for regulating immune responses.</p>	<p>Made by T-cells and B-cells when they are activated to combat an infection. Memory cells persist after pathogen eliminated and if there is a second exposure then memory cells rapidly become activated.</p>

C21 Hypersensitivity	C18 Agglutinin
C18 Agglutinogen	C18 Anemia
C18 Extrinsic blood clotting mechanism	C18 Intrinsic blood clotting mechanism
C18 Formed elements	C18 Hemoglobin
C18 Polycythemia	C22 Tidal volume

<p>Another name for “antibody”. Agglutinin bind to antigens embedded into the plasma membrane.</p>	<p>An immune response to a molecule that most people are able to tolerate.</p>
<p>condition in which you lack enough healthy red blood cells to carry adequate oxygen to your body’s tissues. Having anemia can make you feel tired and weak.</p>	<p>Another name for antigen. Antigens are glycoproteins embedded into the plasma membrane.</p>
<p>Occurs when blood clotting cascade is initiated by platelets within the blood vessels. Result in faster clot formation (15 sec.)</p>	<p>Occurs when blood clotting cascade is initiated by molecules released from tissue outside of the blood vessels.. Result in slower clot formation (5 min)</p>
<p>Protein macromolecule used to transport oxygen in the blood. Pick up oxygen in lungs and transports oxygen to cells throughout the body.</p>	<p>Term used to describe all the cells and cell fragments found in blood. The formed elements are created in red bone marrow.</p>
<p>Volume of air moved in and out of the respiratory tract when you are in a resting state. Tidal volume is 500ml.</p>	<p>Excess number of red blood cells. Primary polycemia caused by cancer. Secondary polycemia caused by other condition (e.g. low oxygen concentration in air)</p>

<p>C22 Alveolar gas exchange</p>	<p>C22 Systemic gas exchange</p>
<p>C22 Ventilation-perfusion coupling</p>	<p>C22 Emphysema</p>
<p>C22 Respiratory cycle</p>	<p>C22 Anatomical dead space</p>
<p>C22 Bronchiole dilation</p>	<p>C22 Bronchiole constrictor</p>
<p>C22 Eupnea</p>	<p>C19 Cardiac output</p>

<p>Occurs throughout the body where oxygen is removed from RBCs and delivered to the cells of the body.</p>	<p>Occurs in the lungs across the respiratory membrane.</p>
<p>Pathologic condition where the respiratory membrane is reduced due to cigarette smoking. Unable to provide enough oxygen to body tissues and stimulates secondary polycythemia</p>	<p>Occurs in lungs where alveolar air with high oxygen and low CO<sub>2</sub> conc. is routed to areas in lung where blood capillaries have low oxygen and high CO<sub>2</sub> concentrations</p>
<p>Structural regions within pulmonary air passageways where gas exchange does not occur.</p>	<p>At rest, the respiratory cycle is 5 seconds. Inspiration = 2 seconds and expiration = 3 seconds.</p>
<p>Narrowing the bronchioles // histamine is a bronchi-constrictor</p>	<p>Widening the bronchioles // epinephrine is a bronchodilator</p>
<p>Volume of blood ejected from heart in one minute. stroke volume x heart rate = cardiac output</p> <p>CO = 5.25 liters per min</p>	<p>is normal, good, unlabored breathing, sometimes known as quiet breathing or resting respiratory rate.</p>

C19 Preload	C19 Stroke volume
C19 Afterload	C19 Isovolumetric
C19 Chronotropic effect	C19 Inotropic effect
C22 Respiratory membrane	C19 Three blood circuits
C19 End diastolic volume	C19 End systolic volume

<p>Volume of blood ejected from heart during cardiac cycle (typically 70 ml)</p>	<p>Action of filling heart ventricles as blood “drops” from atria into the ventricles // the greater the preload the more blood ejected from</p>
<p>Condition occurs when both semilunar and atrialventricular valves are closed. Occurs when heart is contracting and relaxing.</p>	<p>Pressure above semi lunar values that heart must exceed in order to eject blood</p>
<p>Conditions able to increase or decrease the force of the heart contraction (e.g. Calcium ions)</p>	<p>Conditions able to increase or decrease the heart rate (e.g. sympathetic nervous system)</p>
<p>Pulmonary circuit - between right ventricle to left atria /// Systemic circuit - between left ventricle to right atria /// Coronary circuit - between coronary arteries and coronary sinus.</p>	<p>formed by pulmonary capillary and alveoli plasma membrane where respiratory gas diffuse across adjacent membranes.</p>
<p>Occurs when ventricles are fully contracted and ventricles hold the least amount of blood.</p>	<p>Occurs when ventricles are completely relaxed and ventricles hold maximum blood volume.</p>



C19  
Fibrillation

C20  
Anastomosis

C20  
Artery

C20  
Vein

C20  
Capillary

C20  
Circulatory shock

C20  
Edema

C20  
Peripheral resistance

C20  
Vasomotion

C20  
Syncope

An anastomosis is a connection or opening between two things that are normally diverging or branching, such as between blood vessels,

An irregular, often rapid heart rate that commonly causes poor blood flow.

Blood vessel used to carry blood back to heart

Blood vessel used to carry blood away from the heart.

Loss of consciousness due to drop in blood pressure

Occurs between artery and vein where nutrients and waste products may cross a simple squamous epithelial barrier.

Contraction of smooth muscle at the end of the arterial network. An increase in peripheral resistance causes an increase in blood pressure. Regulated by vasomotor nuclei in brain stem.

An accumulation of fluid in the interstitial space.

temporary loss of consciousness caused by a fall in blood pressure.

The ability to change the degree of smooth muscle contraction around blood vessels. Regulated by the vasomotor center in brain stem.