



Al-Maarif University College Department of Nursing Medical Terminology

Stage -1- Medical Terms in Cardiology Lec. 2

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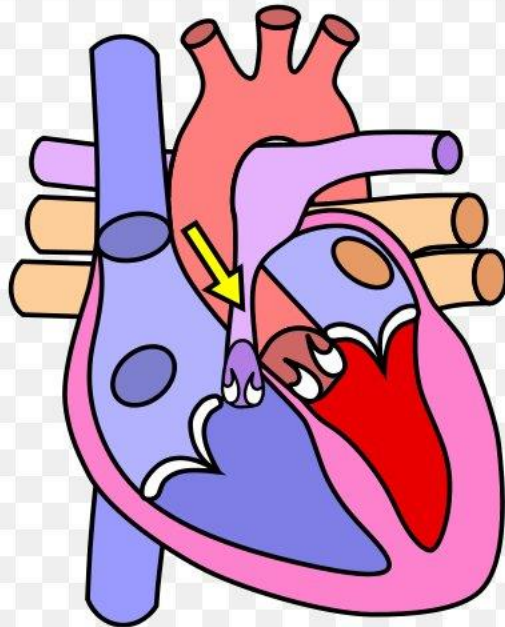
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In this presentation we will learn:

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- **Word roots and Combining vowel for Cardiovascular System**
- **Cardiovascular Specialties**
- **The Structure and Function of the Cardiovascular System**
- **Conduction System of the Cardiovascular System**
- **Diseases and Conditions of the Cardiovascular System**



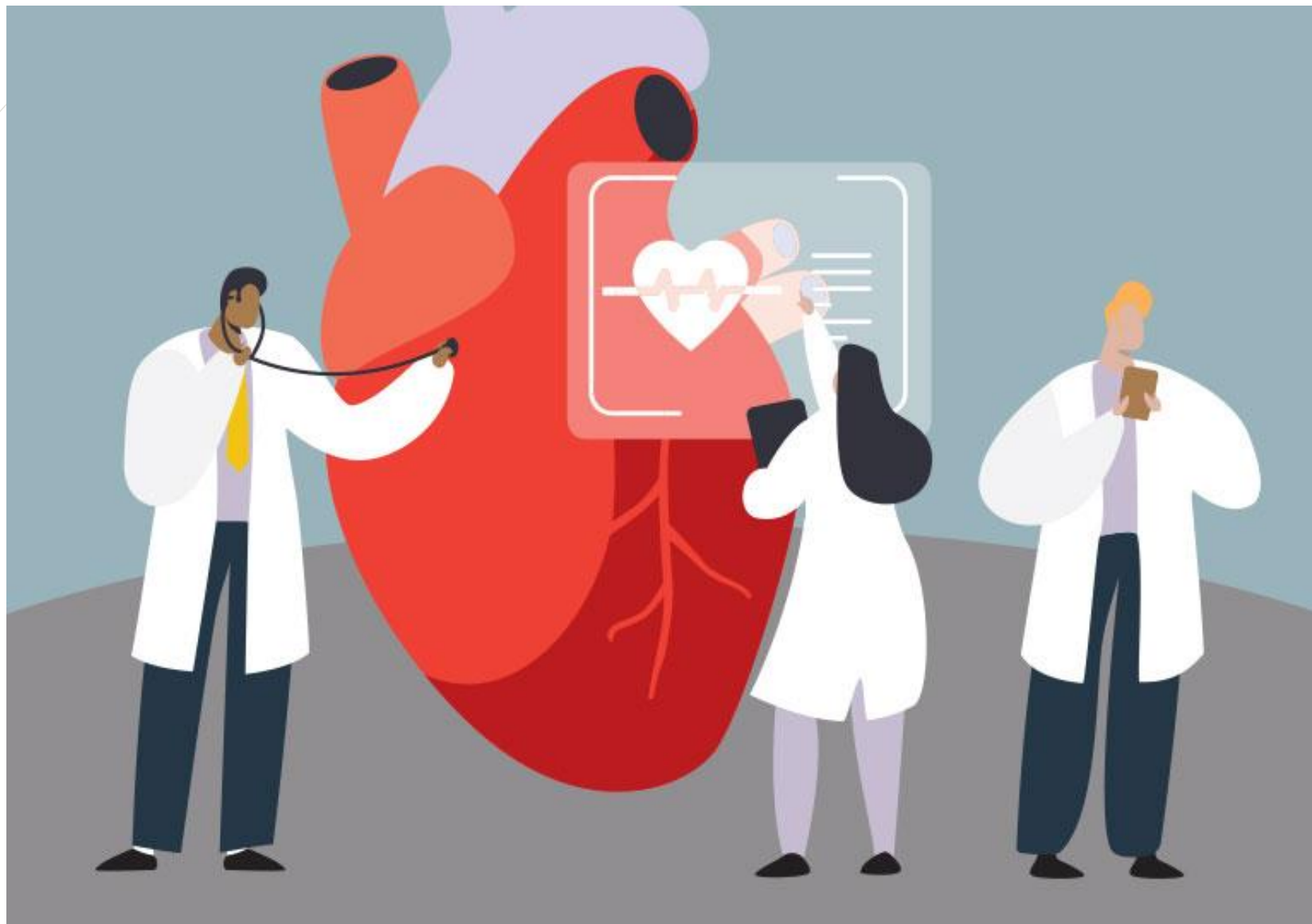
Word Roots and Combining Vowel for Cardiovascular



Word Root	Definition
angi(o), vas(o)	Refers to the vessel, blood vessels and vascular
my(o)	Refers to the muscle
aort(o)	Aorta; is the main and largest artery in the human body, originating from the left ventricle of the heart and extending down to the abdomen.
arter(o), arteri(o)	Artery: The arteries are the blood vessels that deliver oxygen-rich blood from the heart to the tissues of the body.
arteriol(o)	Arteriole: blood vessels
atri (o)	Atrium: is the upper chamber through which blood enters the ventricles of the heart.
cardi(o)	heart
coron(o)	crown
endocardi(o)	Endocardium: is the innermost layer of tissue that lines the chambers of the heart.
echo(o), son(o)	sound
valv(o), valvl(o)	valve
electr(o)	electricity

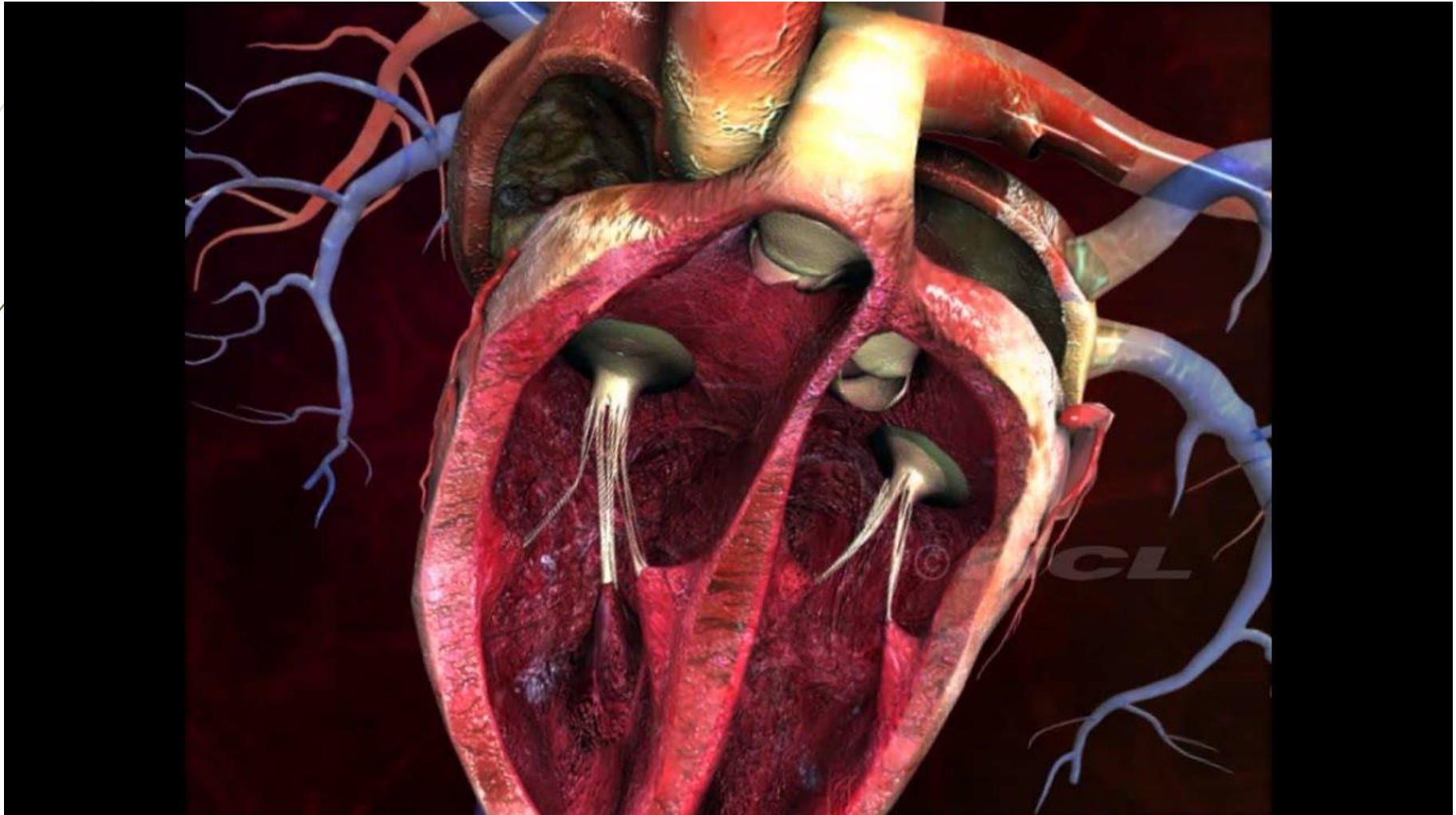
Word Root	Definition	5
myocardi(o)	Myocardium: The muscle layer of the heart	
mediastin(o)	Mediastinum: is the area in the chest between the lungs that contains the heart	
pericardi(o)	Pericardium: is a double-walled sac containing the heart.	
path (o)	disease	
radi(o)	radiant energy or x-ray	
sept(o)	septum, partition: is a layer that separate the two sides of the heart.	
sin(o)	Sinus: is an area of specialized cells in the upper right chamber of the heart. This area controls your heartbeat.	
thorac (o)	chest	
ultra(o)	excessive	
ven(o)	Vein: blood vessels carry blood towards the heart.	
venul(o)	Venule: a network of small veins which finally combined to form veins	
ventricul(o)	Ventricle: The heart has four chambers. The upper two chambers are the atria , and the lower two are the ventricles	

Cardiovascular Specialties



Medical Term	Definition
Cardiology	<ul style="list-style-type: none">▪ Cardi refers to the heart .▪ ology refers to the study of.▪ Cardiology is the study of the disorders of the heart.
Cardiologist	<ul style="list-style-type: none">▪ Cardi refers to the heart.▪ ologist refers to one who studies.▪ A cardiologist specializes in disorders of the heart. A cardiologist can order and interpret the test. A cardiologist can advise the patient of their option.
Interventional cardiologist	<ul style="list-style-type: none">▪ An interventional cardiologist is a sub-specialty of cardiologists that can perform advanced cardiac procedures such as catheter-based procedures.
Cardiac surgeon	<ul style="list-style-type: none">▪ A cardiac surgeon can perform major procedures on the heart and the vessels.
Electrophysiologist	<ul style="list-style-type: none">▪ Electr(o) refers to electricity.▪ physi(o) means related to physiology.▪ ologist refers to one who studies.▪ Physiology is the study of the science and processes of the human body.▪ Electrophysiology deals with the relationship between electrical phenomena and biological function.▪ An electrophysiologist is a person who works with the body's electrical and biological functions.
Electrophysiologist cardiologist	<ul style="list-style-type: none">▪ An electrophysiologist cardiologist studies the heart electrical impulses.

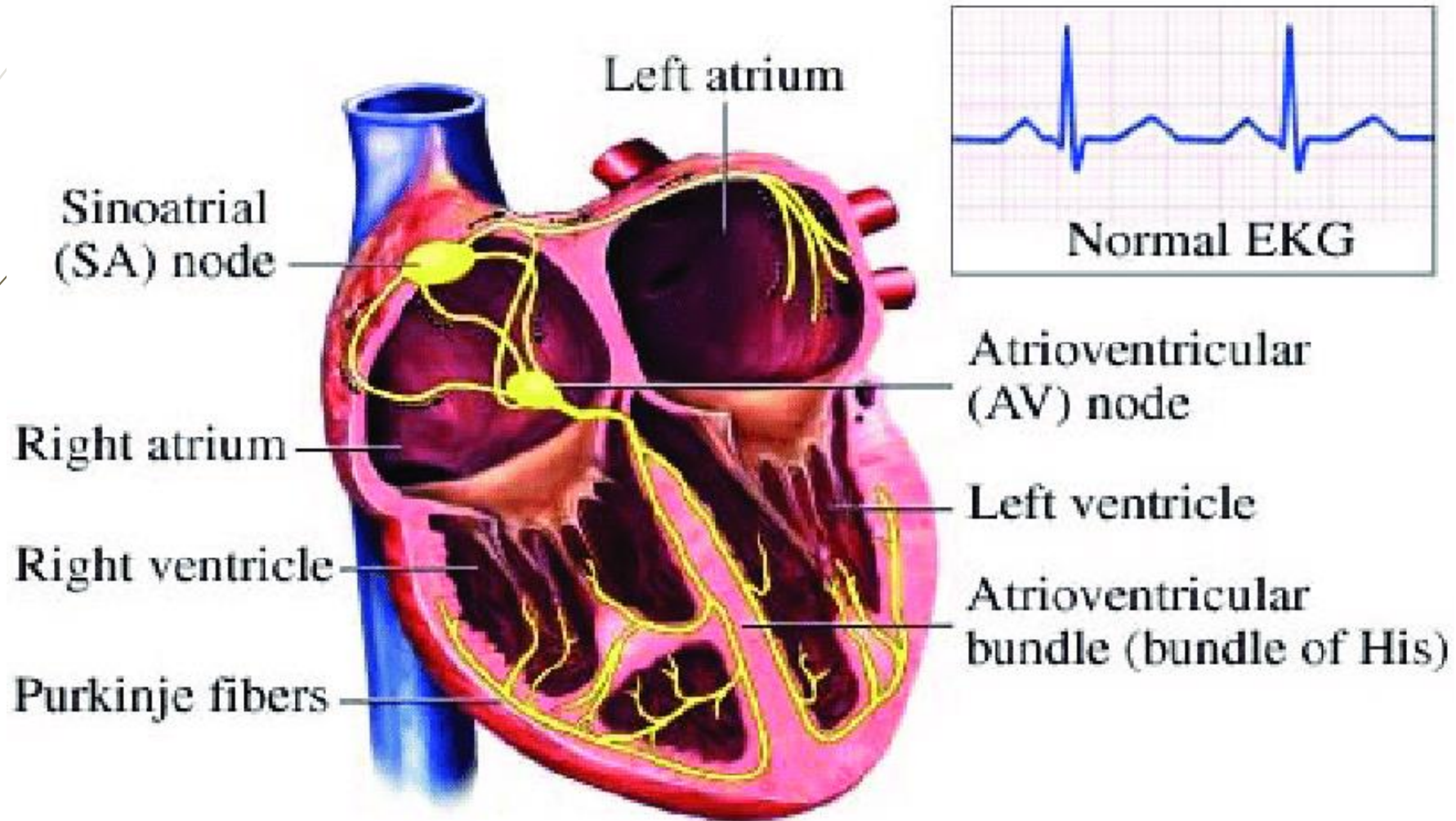
The Structure and Function of the Cardiovascular System



Medical Term	Definition
Epicardium	<p>Epi- refers to above or outer.</p> <p>Cardium refers to the heart.</p> <p>The epicardium is the outer layer of the heart.</p>
Endocardium	<p>Endo- refers to within.</p> <p>Cardium refers to the heart.</p> <p>The endocardium is the innermost layer of the heart.</p>
Carotid	<p>Carotid refer to the arteries of the neck that supply blood to the head and neck.</p>
Atrium	<p>Atri(o) refers to the atrium.</p> <p>Atria is the plural form of atrium.</p> <p>An atrium is a cavity or chamber. The atrium of the heart is one of the top chambers of the heart.</p>
Myocardium	<p>My(o) refers to muscle.</p> <p>Cardium refers to the heart.</p> <p>The myocardium is the middle muscular layer of the heart.</p>

Medical Term	Definition	10
Pericardium	<p>Peri- means around.</p> <p>Cardium refers to the heart.</p> <p>The pericardium is a thin sac that surrounds the heart.</p>	
Septum	<p>Septa is plural for the septum.</p> <p>The septum is a partition or wall that separates the right and the left side of the heart.</p>	
Thorax	<p>Thorax refers to the chest.</p> <p>-thoracic is a suffix meaning the chest.</p> <p>The Thorax is the upper part of the trunk which contains the heart and lungs.</p> <p>The plural forms are thoraxes, thoraces.</p>	
Ventricles	<p>A ventricle is a cavity located at the bottom of the heart.</p> <p>Ventricular pertains to the ventricle.</p>	

Conduction System of the Cardiovascular System



Medical term	Definition
Cardiac output	Cardiac output is the amount of blood ejected by the heart with each heartbeat.
Contractility	Contractility is the ability of muscle tissue to contract.
Diastole	<p>Dia- refers to apart or through.</p> <p>-stole is a suffix meaning contraction.</p> <p>-diastole is also a suffix meaning period of dilation of the heart.</p> <p>Diastole is the period between contractions or the resting period of the heart when the ventricles are filling or dilating.</p>
Diastolic	Diastolic pertains to diastole or the blood pressure during the relaxation of the heart.
Electrocardiograph (ECG)	<p>Electr(o) refers to electric.</p> <p>Cardi(o) refers to the heart.</p> <p>-graph is a suffix meaning product of a drawing, writing or recording.</p> <p>An electrocardiograph, also known as an ECG is used to record the electrical activity of the heart.</p>
Systole	<p>Sy- means an association.</p> <p>-stole is a suffix meaning contraction.</p> <p>-systole means type and location of a higher blood pressure measurement.</p> <p>Systole means the contraction of the heart.</p>
Systolic	Systolic is the pressure created when the ventricles contract. This is the top reading of the blood pressure.

Diseases and Conditions of the Cardiovascular System



Medical term	Definition
Angiopathy	<p>Angi(o) refers to a vessel.</p> <p>-pathy refers to a disease.</p> <p>Angiopathy is a disease of the blood vessels.</p>
Atherosclerosis	<p>Ather(o) refers to an artery.</p> <p>-sclerosis refers to hardening.</p> <p>Atherosclerosis means the build-up of fatty plaque or cholesterol in the lining of the arteries. The walls become thick, fibrotic and calcified.</p>
Arrhythmia	<p>A- refers to without.</p> <p>Rhythmia refers to the rhythm.</p> <p>Arrhythmia means an irregular heart rhythm.</p>
Bradycardia	<p>Brady- refers to slow.</p> <p>Cardia refers to the heart.</p> <p>Bradycardia means a heart rate less than 60 beats per minute.</p>
Cardiomyopathy	<p>Cardi(o) refers to the heart.</p> <p>My(o) refers to the muscle.</p> <p>-pathy refers to the disease.</p> <p>Cardiomyopathy is a disease of the myocardium causing enlargement.</p>
Tachycardia	<p>Tachy- refers to fast.</p> <p>Cardia refers to the heart.</p> <p>Tachycardia is a condition in which the heart beats at a rate faster than 100 beats per minute.</p>

Medical Term	Definition
Pericarditis	<p>Peri- refers to around. Card refers to the heart. -itis refers to inflammation. The pericardium is the sac that surrounds the heart. Pericarditis is the inflammation of the pericardium.</p>
Ischemia	<p>Ischemia means to hold back blood. Ischemia is a decreased blood supply to a body part.</p>
Myocardial Infarction (MI)	<p>My(o) refers to muscle. Cardial refers to the heart. An infarct is a localized area of necrosis. MI is necrosis of part of the cardiac muscle caused by an obstruction of the coronary artery that affects the heart ability to pump.</p>
Cardiac arrest	<p>Cardiac refers to the heart. Arrest means to inhibit, restrain or stop. A cardiac arrest is a sudden stoppage of cardiac circulation and cardiac output.</p>
Coronary artery disease (CAD)	<p>Coronary refers to encircling structures. Coronary artery disease is a condition affecting the arteries of the heart that cause a reduction of blood flow to the myocardium.</p>

Medical Term	Definition
Endocarditis	<p>Endo- refers to inward or within. Card refers to the heart. -itis refers to inflammation. Endocarditis is the inflammation of the endocardium and heart valve.</p>
Hemostasis	<p>Hemo- refers to blood or blood vessels. -stasis refers to halting. Hemostasis is the halting of bleeding by the coagulation process or by chemical or mechanical means. The opposite of hemostasis is hemorrhage</p>
Pericardial effusion	<p>Peri- refers to around. Cardial refers to the heart. Effusion means to pour out or the escape of fluid. Pericardial effusion is the escape of fluid into the pericardial sac.</p>
Congestive heart failure	<p>Congestive refers to congestion which is an abnormal accumulation of fluid. Congestive heart failure is a condition in which the cardiac output is impaired and is unable to meet the needs of the body causing an abnormal accumulation or backup of fluid and peripheral edema.</p>
Thrill	<p>A thrill is a vibration felt over an area of the patient's body caused by turbulent blood flow.</p>

Arteriosclerosis

Arteri(o) refers to an artery.
-sclerosis means hardening.

Arteriosclerosis means hardening of the arteries due to calcification, thickening and loss of elasticity.

Cardiogenic shock

Cardi(o) refers to the heart.
-genic refers to causing, forming or producing.

Cardiogenic refers to originating in the heart.

Shock is a condition characterized by inadequate blood flow to the body.

Cardiogenic shock is a condition associated with a myocardial infarction resulting in a low cardiac output.

Hypertension

Hyper- refers to excessive, above and beyond.

Tension refers to stretch or pressure.

Hypertension is a common condition characterized by an elevated blood pressure when there is an abnormally high amount of pressure on the arteries.

Hypotension

Hypo- refers to under, below or beneath

Hypotension is a condition characterized by a low blood pressure or when there is not an adequate amount of pressure in the arteries for normal perfusion.

Thank You & Good Luck

