Cardiovascular System Pathologies

- coronary artery disease-
- atherosclerosis-
- atheroma -
- plaque-
- ischemia-
- angina pectoris-



- myocardial infarction (MI)- (aka _____) -
- **congestive heart failure- (CHF)** condition in which the heart is unable to pump enough blood flow to the whole body; as a result, kidneys malfunction and allow fluid to build up in the legs, ankles & lungs.

Carditis-

- Endocarditis
- Bacterial endocarditis
- Myocarditis
- Pericarditis inflammation of the surrounding of the heart or pericardium

Heart Valves

- Valvulitis -
- mitral valve prolapse- protrusion of the mitral valve does not allow it to close entirely
- o mitral stenosis-
- heart murmur- the sound made by the abnormal blood flow through a malfunctioning valve

Arrhythmias

Cardiac Arrhythmia/dysrhythmia-

Bradycardia –

Tachycardia –

Flutter - cardiac arrhythmia where the atrial contractions are rapid but regular

Palpitation –

Paroxysmal Tachycardia – sudden onset of a fast heartbeat

Fibrillation

fibrillation-

atrial fibrillation- also known as _____:

ventricular fibrillation- also known as _____:

Blood Vessel Pathology

- vasculitis/angiitis-
- Angionecrosis death of the walls of the blood vessels
- angiospasm- spasmodic contraction of the blood vessels
- stenosis/angiostenosis-



- Hemangioma
- hypoperfusion- deficiency of blood passing through an organ or body part *Perfusion
- aneurysm-
- Arteritis/polyarteritis inflammation of one or several arteries
- Arteriosclerosis -
- **Raynaud's Phenomenon** intermittent attacks of pallor (paleness), cyanosis, and redness of the fingers and toes; due to arterial and arteriolar contraction usually caused by cold or emotion
- Phlebitis -

• varicose veins-Thromboses & Embolisms

- Thrombotic occlusion -
- Coronary thrombosis –



• Embolus -

Blood Disorders and Blood Cells

- **Dyscrasia** any abnormal or pathologic condition of the blood
- septicemia- (aka
- hemochromatosis-

_____) -

- Erythrocytosis-
- thrombocytopenia- (aka _____) abnormal decrease in platelets
- leukopenia- abnormal decrease in the number of white blood cells
- leukemia-

Cholesterol

Consists of lipids that travel in the blood in packages called ______.

- high-density lipoproteins (HDL)- ____ cholesterol
- triglycerides-
 - Homocysteine

Hyperlipidemia

Anemias

- anemia=
- Examples:
 - aplastic anemia hemolytic anemia iron-deficiency anemia
 - megaloblastic anemia pernicious anemia sickle-cell anemia
 - thalassemia

Hypertension

- layman's term: _____
- Primary hypertension/essential hypertension-
- Secondary hypertension-
- **Malignant hypertension** sudden onset of severely elevated blood pressure; can be lifethreatening as it damages small vessels in the brain, retina, heart, and kidneys

Diagnostic Procedures of the CV System

These procedures use a variety of electronic means and mediums to study the heart. Label the following and summarize the procedure!



Cardiovascular System







| Blood Tests | CBC complete blood count group of tests to evaluate several conditions |
|----------------------|--|
| Angiocardiography | |
| | |
| Thallium Stress Test | |

| Transesophageal | |
|------------------|--|
| Echocardiography | |

SURGERIES/PROCEDURES

| Balloon angioplasty | |
|---------------------------|--|
| Stent | |
| atherectomy | Surgical removal of plaque from the interior lining of an atery |
| Endarterectomy | |
| Carotid Endarterectomy | Surgical removal of a portion of a clogged carotid artery leading to the brain |
| bypass surgery | |
| MIDCAB | Minimally Invasive Direct Coronary Artery Bypass |
| defibrillation | |
| pacemaker | |
| CPR | Cardiopulmonary Resuscitation |
| aneurysmectomy | |
| aneurysmorrhaphy | |
| arteriectomy | |
| hemostasis | Means to control bleeding |
| Plasmapheresis | |

transfusion

TREATMENTS ... MEDICINES

- To reduce high blood pressure: aka antihypertensives
 - ACE Inhibitors -
 - Beta blockers- slow the heart
 - **Calcium channel blockers-** reduce the contraction of the muscles that squeeze blood vessels tight
 - \circ diuretics-
- Additional important medicines
 - statins- used to reduce LDL or bad cholesterol and triglycerides or to raise HDL or good cholesterol
 - digotoxin -
 - nitroglycerin-
 - anticoagulant- aka _____; slows blood clotting (coagulation) and prevents new clots from forming
 - o antiarrhythmic-
 - vasoconstrictor/vasodilator-

Career Opportunities:

cardiologist hematologist phlebotomist perfusionist cardiovascular technologist EKG Technician

** These could show up on a test!