

## 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
- **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 \_\_\_\_\_:

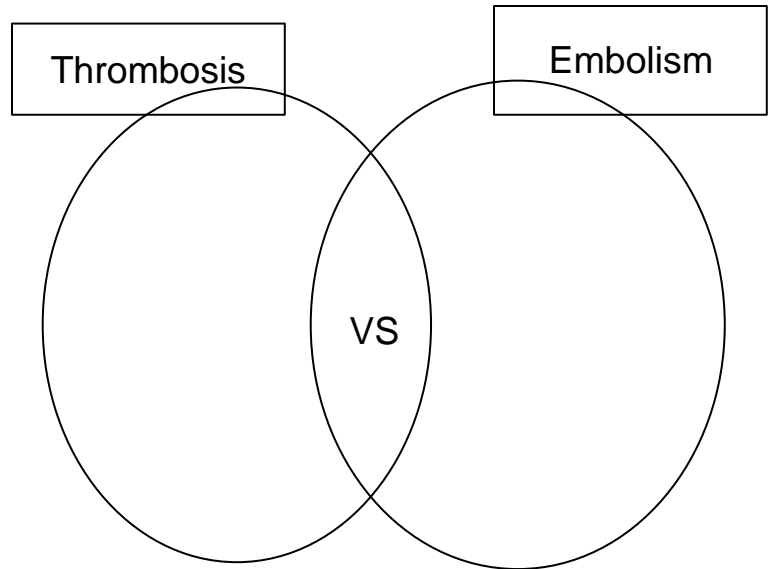
## Blood Vessel Pathology

- **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 \_\_\_\_\_.

- **low-density lipoproteins (LDL)-** \_\_\_\_ cholesterol- contributes to plaque buildup ☠
- **high-density lipoproteins (HDL)-** \_\_\_\_ cholesterol 😊😊😊
- **triglycerides-**
  - *Homocysteine*
  - *Hyperlipidemia*

## Cardiovascular System

### 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 life-threatening as it damages small vessels in the brain, retina, heart, and kidneys

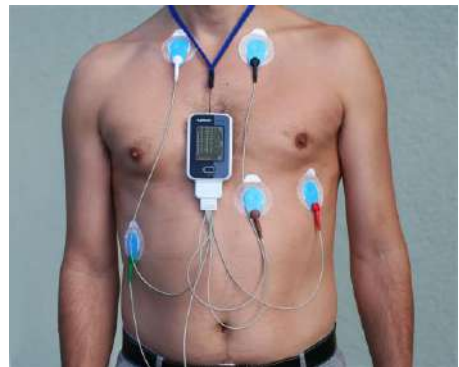
### Diagnostic Procedures of the CV System

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

A. \_\_\_\_\_

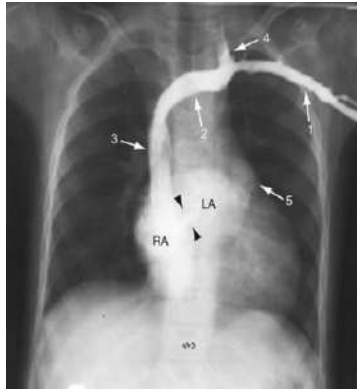
B. \_\_\_\_\_

C. \_\_\_\_\_



## Cardiovascular System

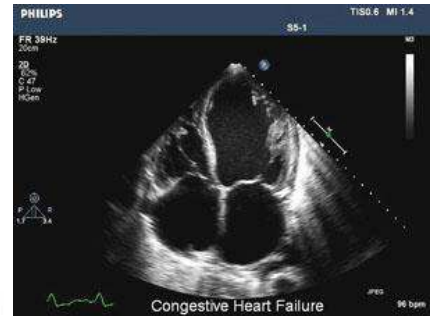
D. \_\_\_\_\_



E. \_\_\_\_\_



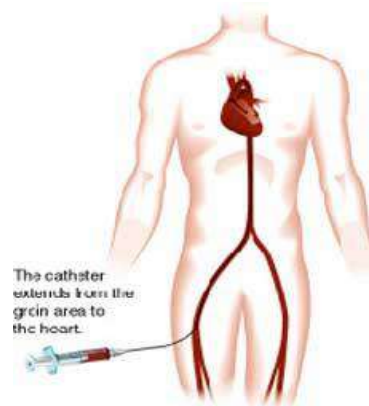
F. \_\_\_\_\_



G. \_\_\_\_\_



H. \_\_\_\_\_



<b>Blood Tests</b>	CBC complete blood count group of tests to evaluate several conditions
<b>Angiocardiology</b>	
<b>Thallium Stress Test</b>	
<b>Transesophageal Echocardiography</b>	

## Cardiovascular System

### SURGERIES/PROCEDURES

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

## Cardiovascular System

### 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
  - **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
  - **antiarrhythmic**-
  - **vasoconstrictor/vasodilator**-

#### ***Career Opportunities:***

cardiologist  
hematologist  
phlebotomist  
perfusionist  
cardiovascular technologist  
EKG Technician

***\*\* These could show up on a test!***