

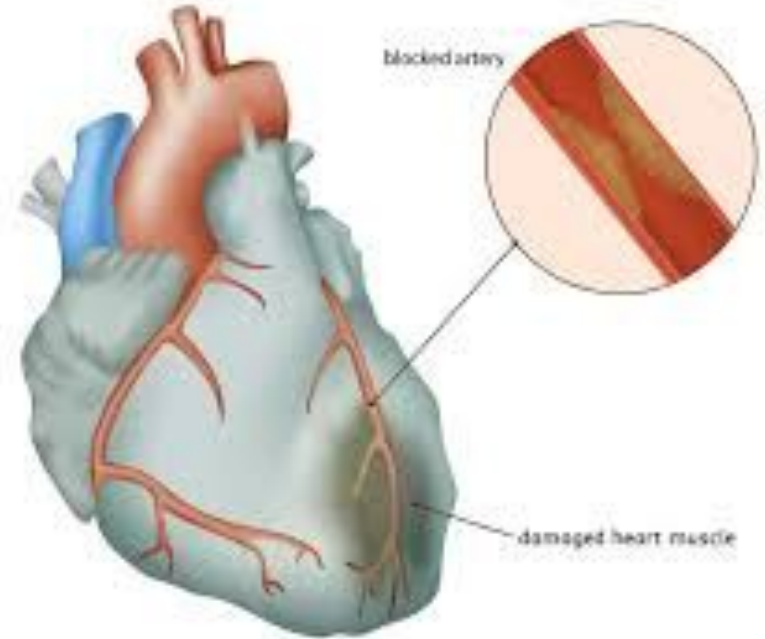
# *Homeostatic Imbalances*

**Grades 9+  
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# Homeostatic Imbalances

- ★ **Angina Pectoris**
  - Temporary lack of oxygen to the myocardium
- ★ **Myocardial Infarct**
  - Heart Attack
    - Permanent damage to the myocardium by the lack of oxygen

## Myocardial infarction



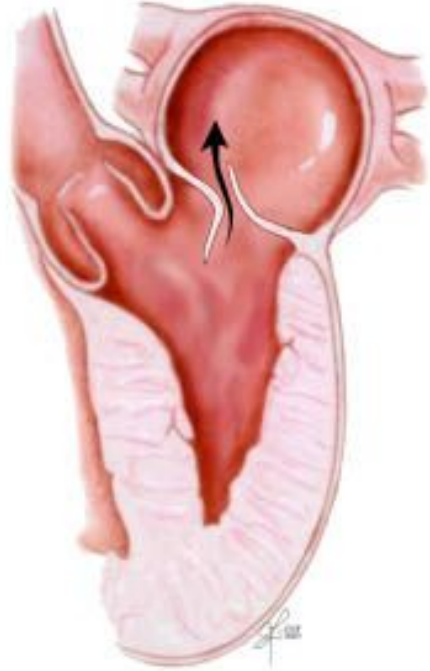
# Homeostatic Imbalances



Normal Closure



Prolapse Closure



## Valve Prolapse:

- Leaky valve
- May hear a heart murmur



## Pericarditis:

- Inflammation of the pericardium
- Friction rub can be auscultated and painful

# Homeostatic Imbalances

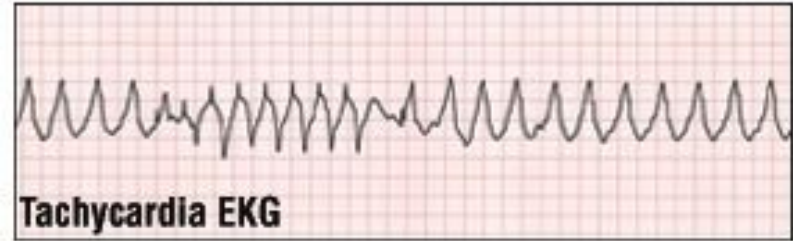
## ★ Tachycardia

- Fast heart rate
- Greater than 100 bpm



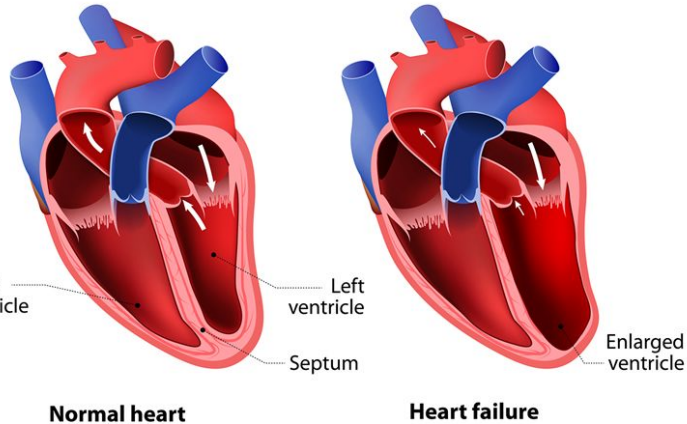
## ★ Bradycardia

- Slow heart rate
- Less than 50 bpm

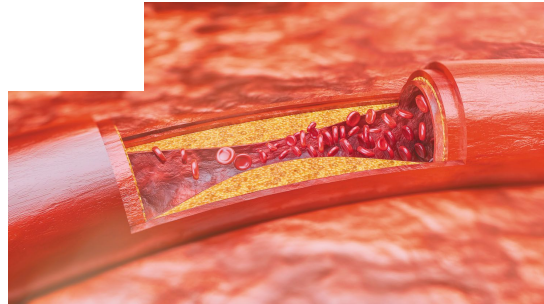


# Homeostatic Imbalances

## HEART FAILURE



- ★ **Coronary Atherosclerosis**
  - Lipid deposits on the artery walls
- ★ **Congestive Heart Failure (CHF)**
  - Inability of the heart to pump efficiently and there is a backup of blood.



# Homeostatic Imbalances

- ★ **Necrosis**
  - Tissue death
- ★ **Ischemia**
  - Decrease in blood supply (hypoxia)
- ★ **Aneurysm**
  - Weak area in the wall of a blood vessel

