



# Cardiac electrophysiology

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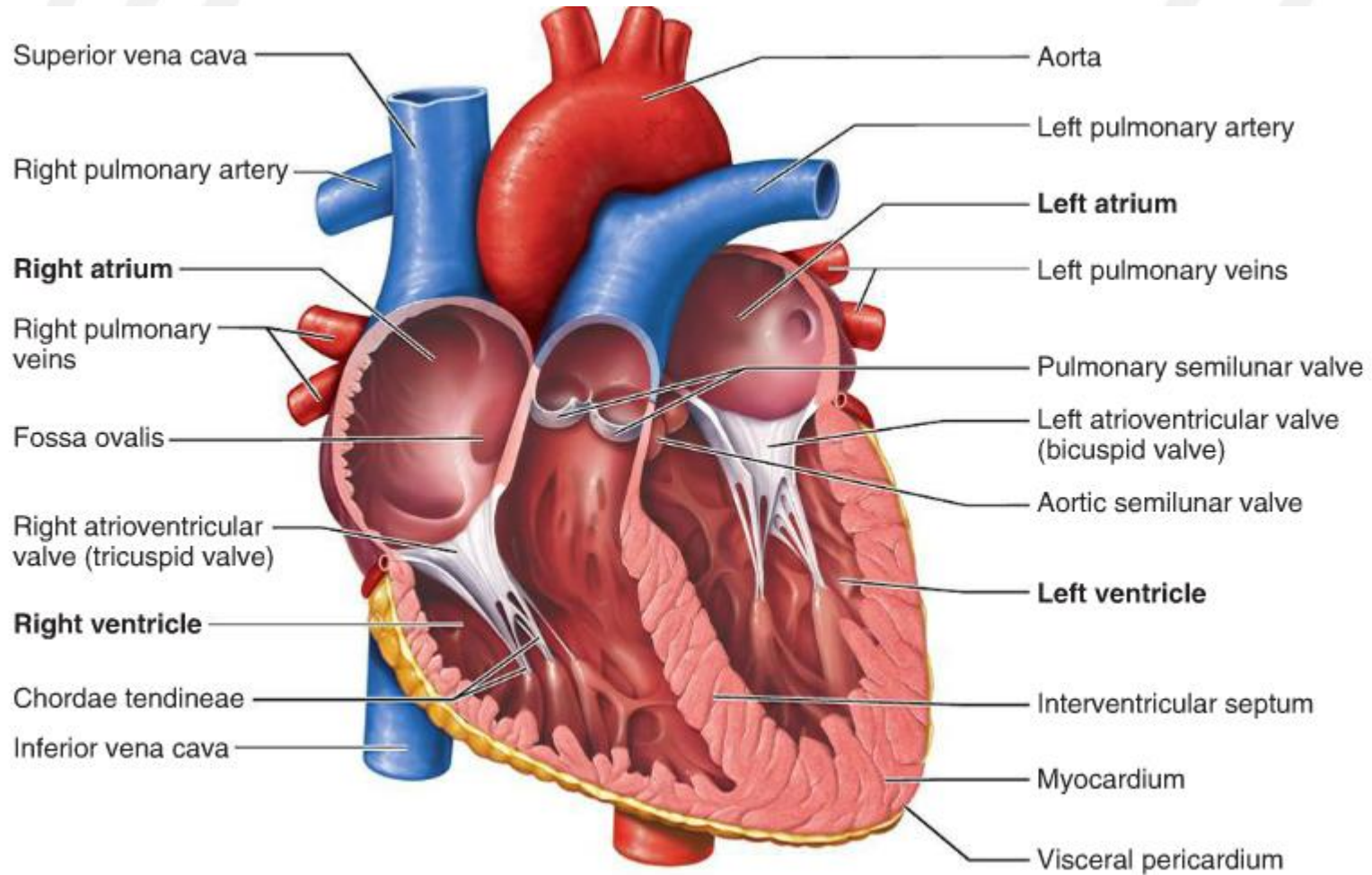
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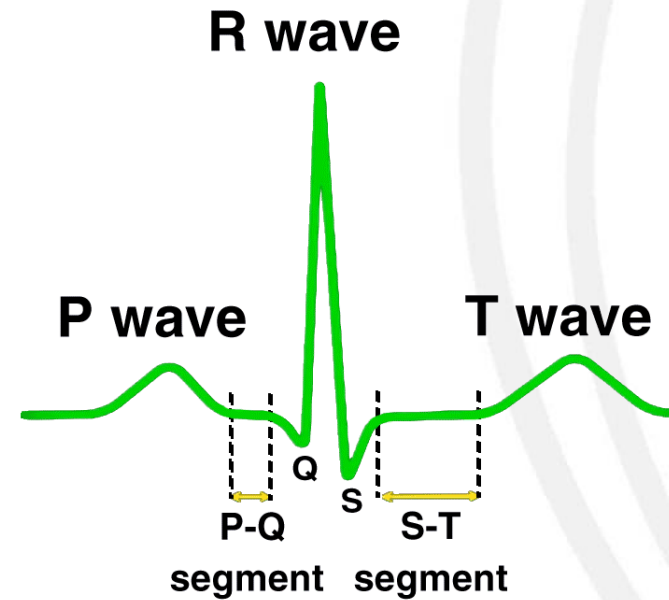
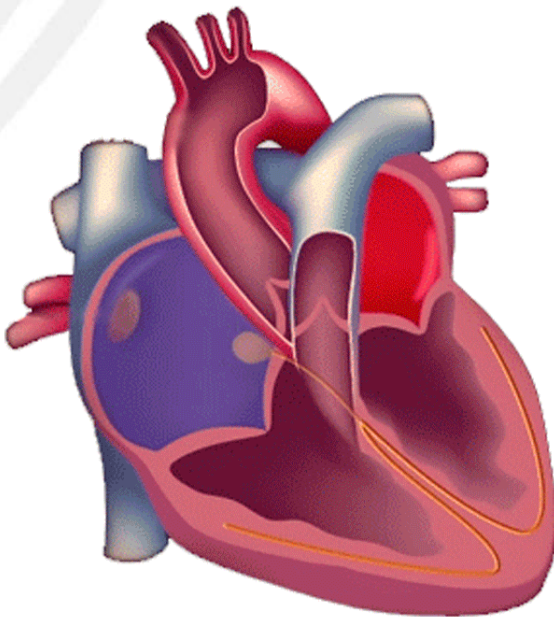


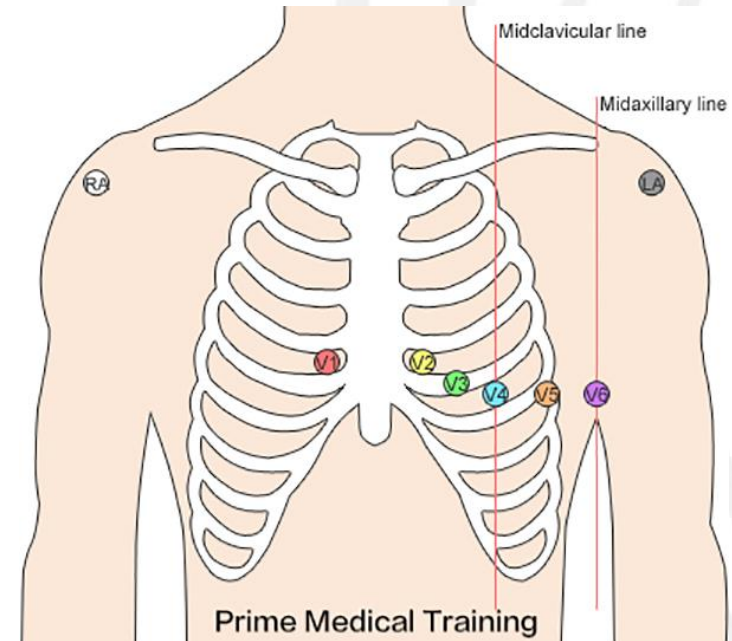
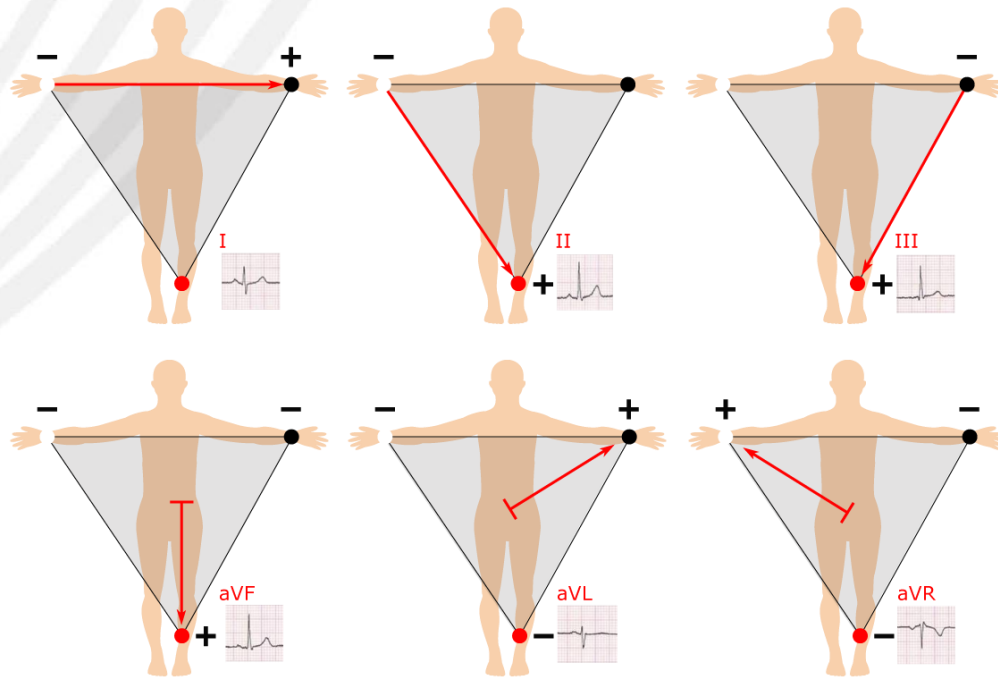
1. Cardiac conduction system
2. Normal rythm (sinus rythm)
3. Arrythmias
  1. Tachycardia
  2. Bradycardia
  3. Premature atrial contraction
  4. Premature ventricular contraction
  5. Atrial fibrillation
  6. Ventricular fibrillation

# CARDIAC CONDUCTION SYSTEM



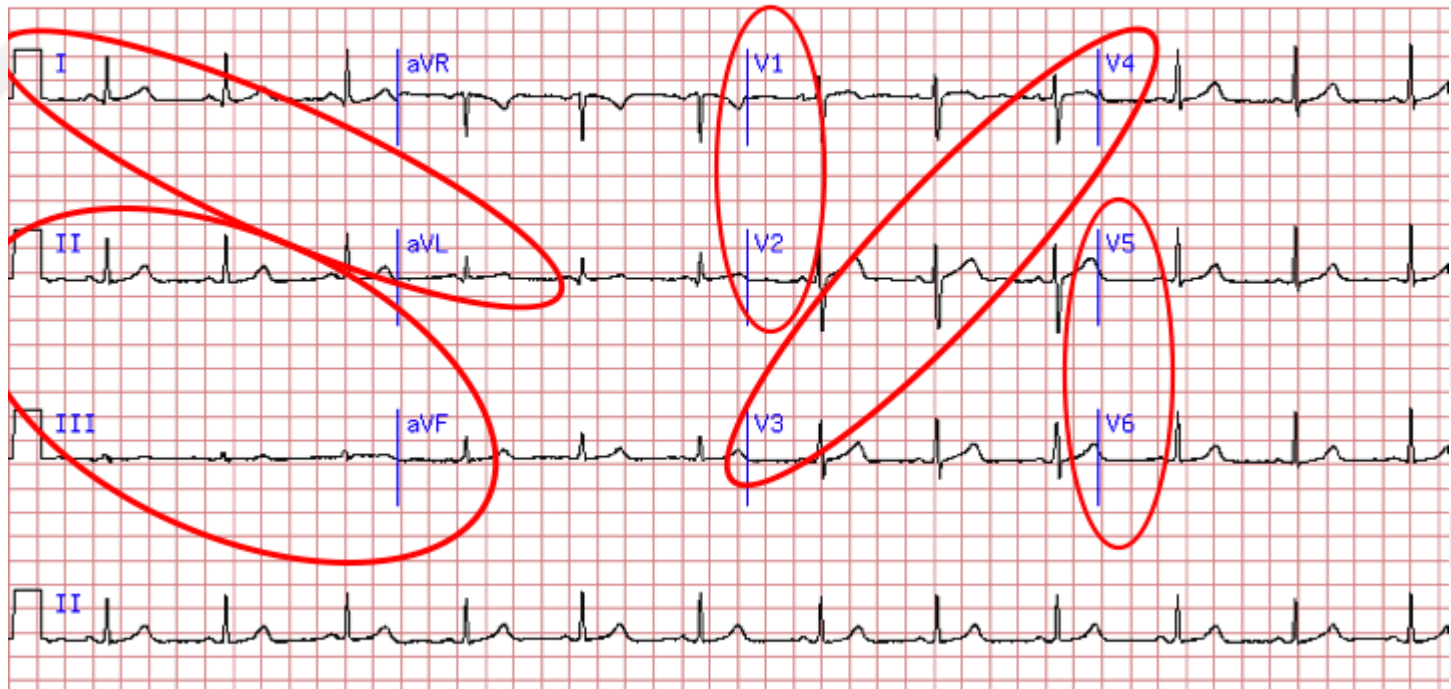
# CARDIAC CONDUCTION SYSTEM



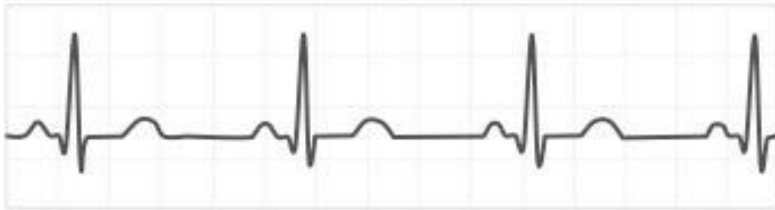




# The 12 lead ECG:



## Normal Sinus Rhythm



Complexes normal, evenly spaced. Rate 60–100 bpm

## Arrhythmia



All complexes normal, rhythm irregular

## Bradycardia



Complexes normal, evenly spaced. Rate < 60 bpm

## Tachycardia



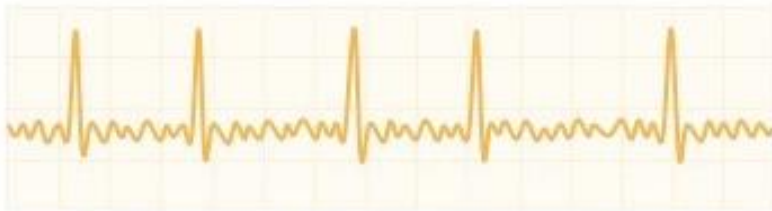
Complexes normal, evenly spaced. Rate > 100 bpm

Normal rhythm 60 – 100 bpm

Bradycardia < 60 bpm

Tachycardia > 100 bpm

## Atrial Fibrillation



Baseline irregular. Ventricular response irregular

AF disorganised atrial activity  
Heart rate > 100 bpm

## Ventricular Fibrillation



Rapid, wide irregular ventricular complexes

VF disorganised ventricular activity  
Risk of sudden cardiac death