



Cardiac electrophysiology

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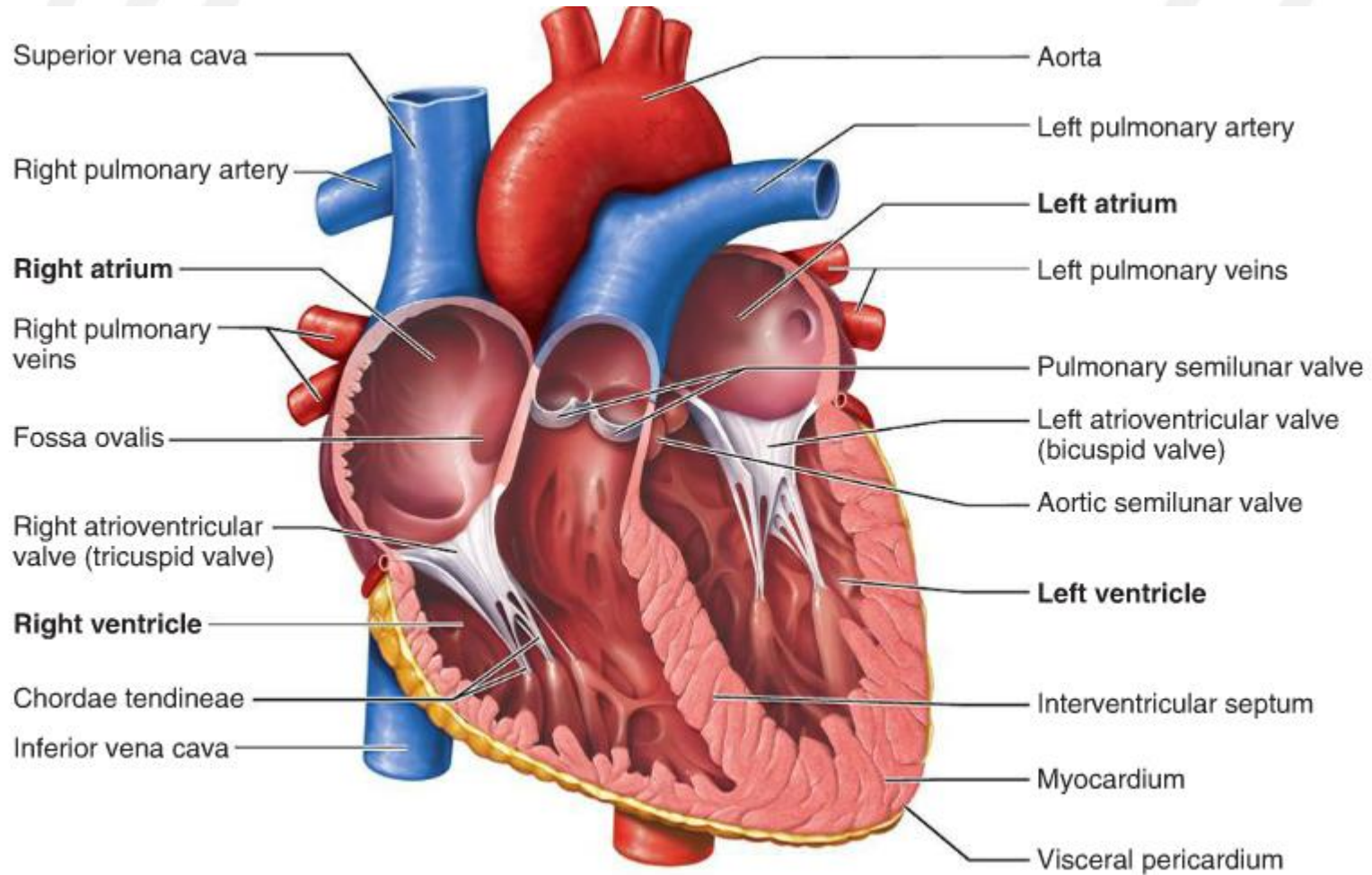
Electrophysiology and Heart Modeling Institute (IHU LIRYC)

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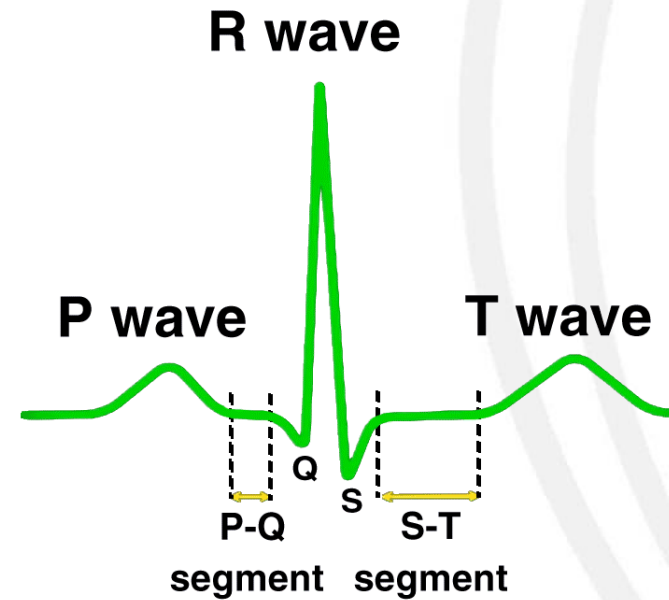
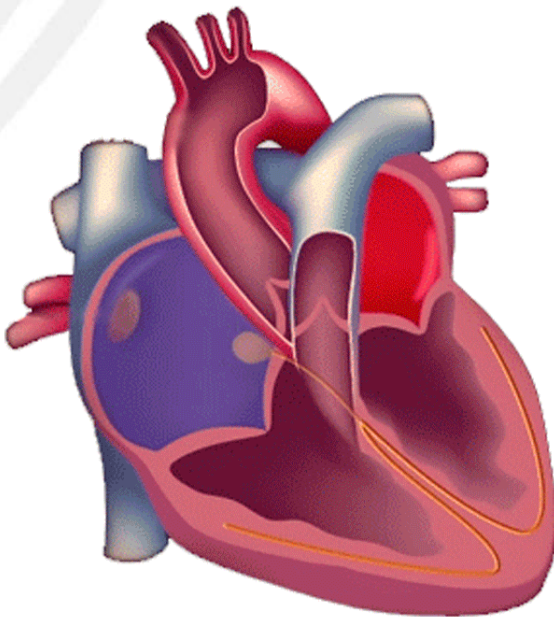


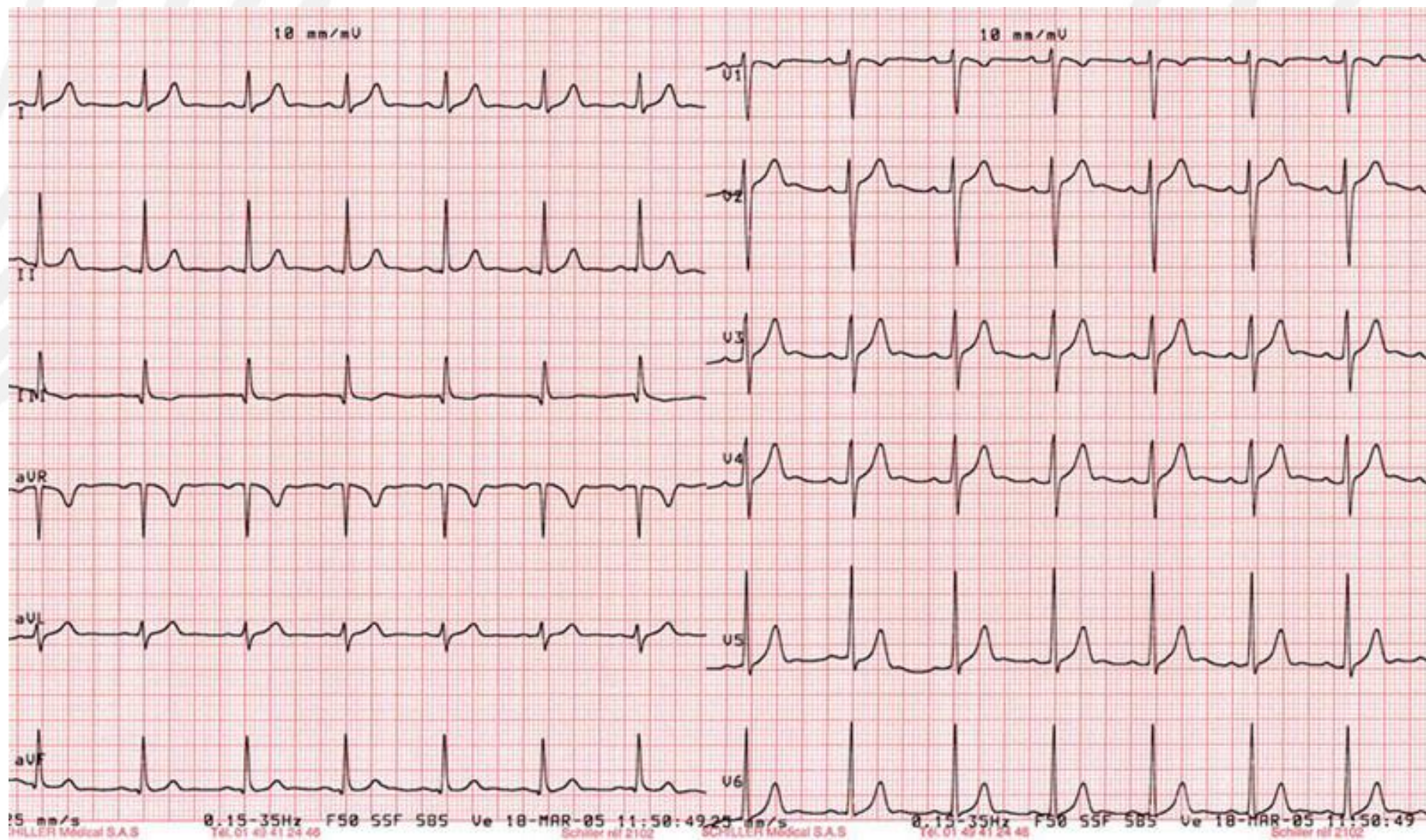
1. Cardiac conduction system
2. Normal rythm (sinus rythm)
3. Arrythmias
 1. Tachycardia
 2. Bradycardia
 3. Premature atrial contraction
 4. Premature ventricular contraction
 5. Atrial fibrillation
 6. Ventricular fibrillation

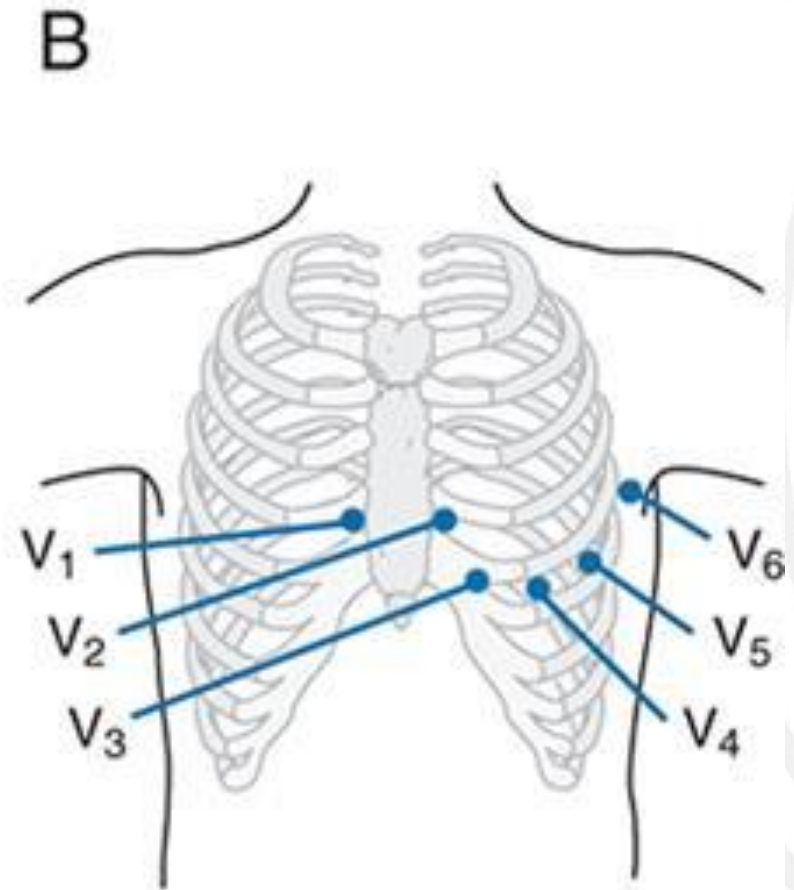
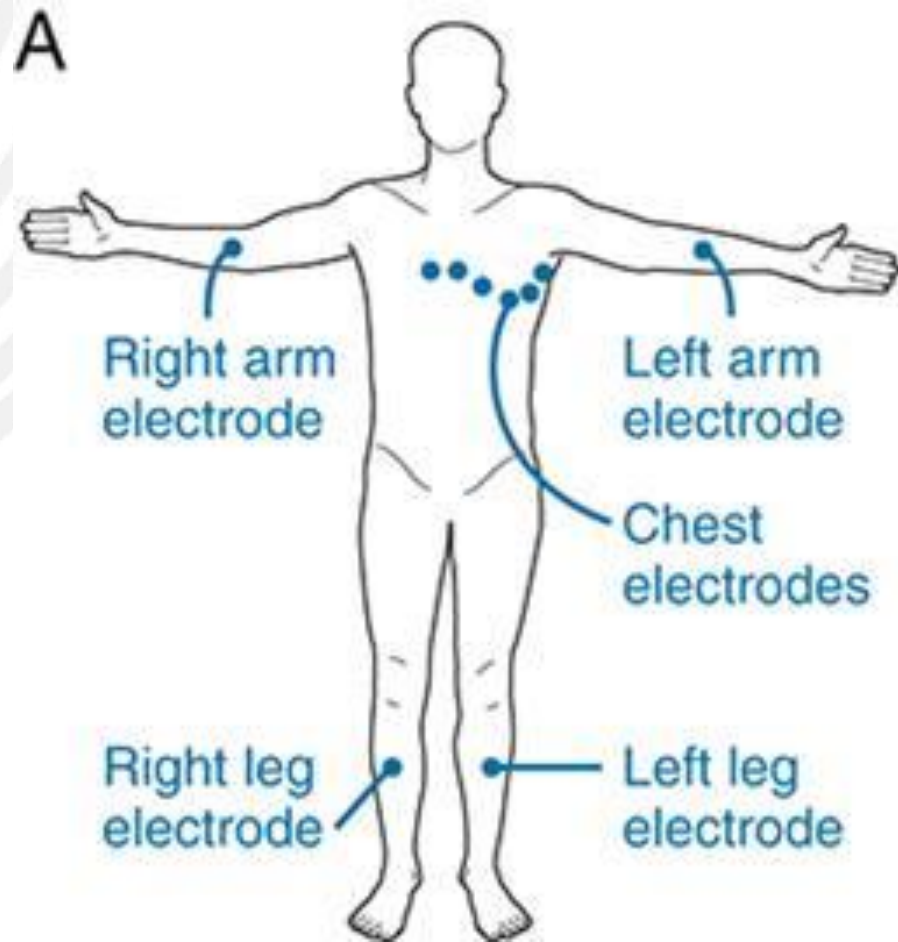
CARDIAC CONDUCTION SYSTEM

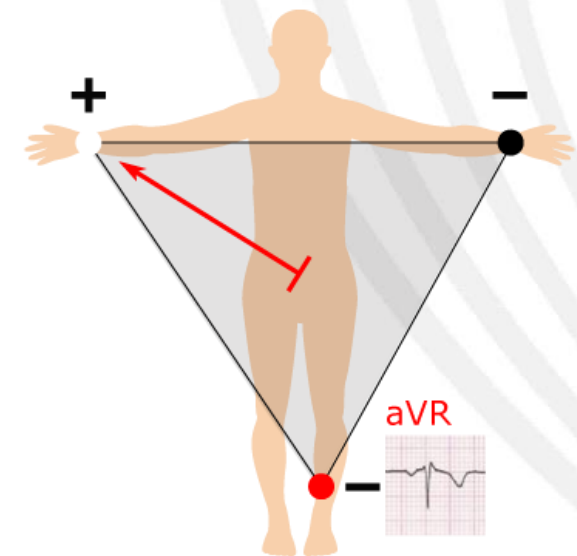
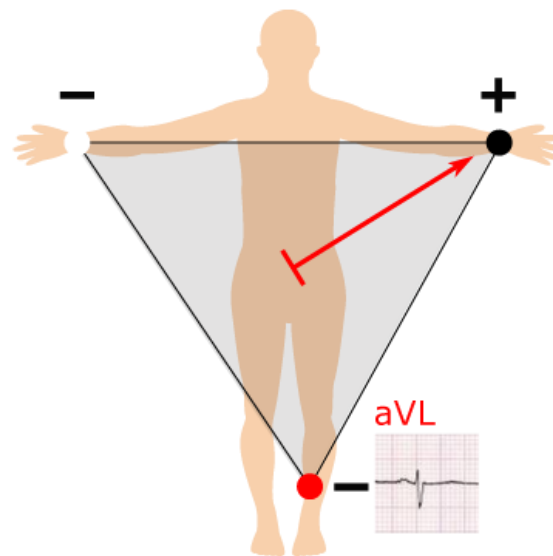
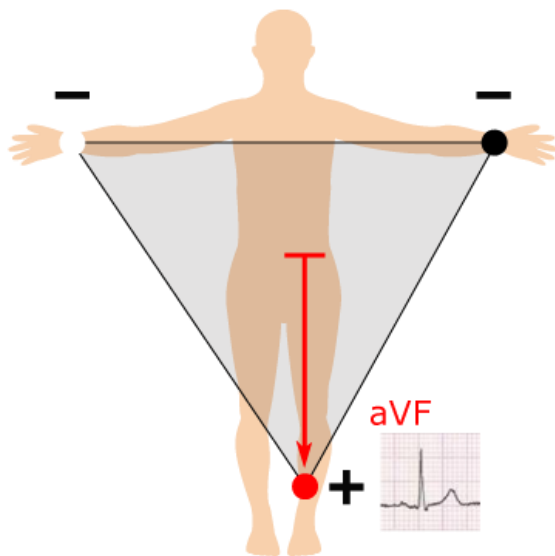
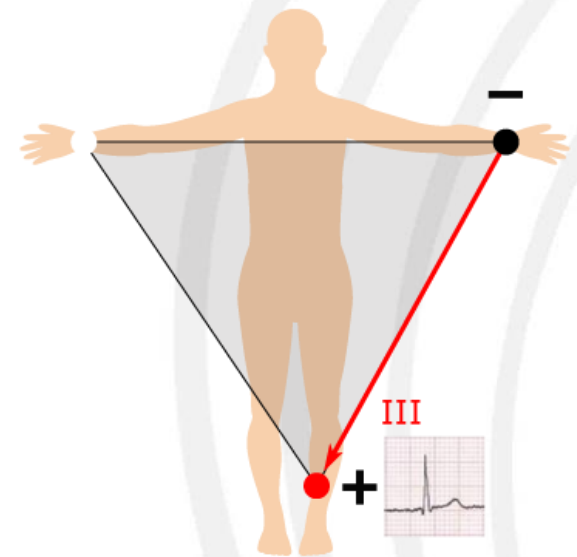
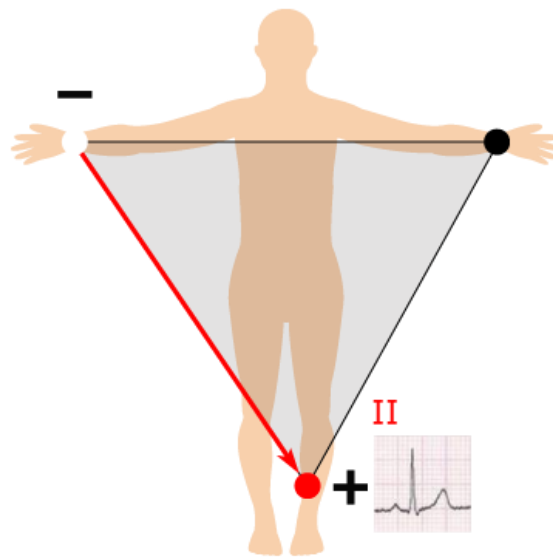
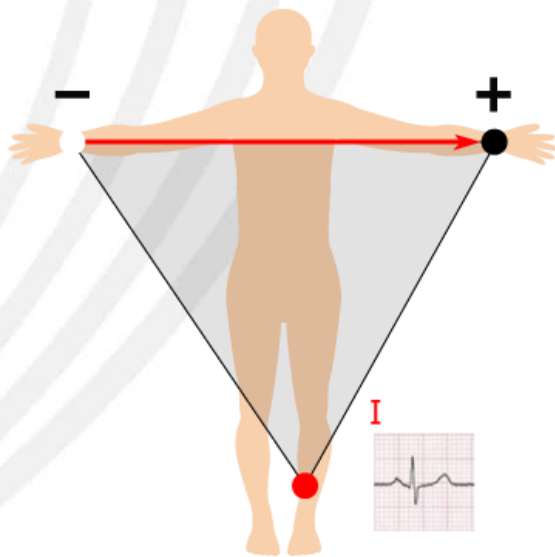


NORMAL RYTHM (SINUS RYTHM)

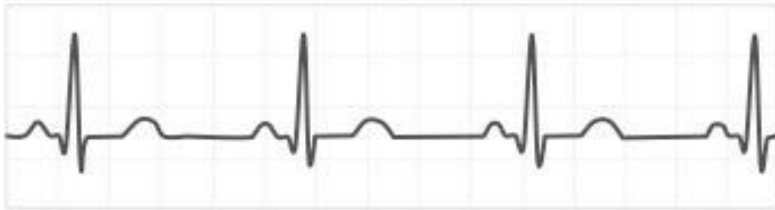








Normal Sinus Rhythm



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

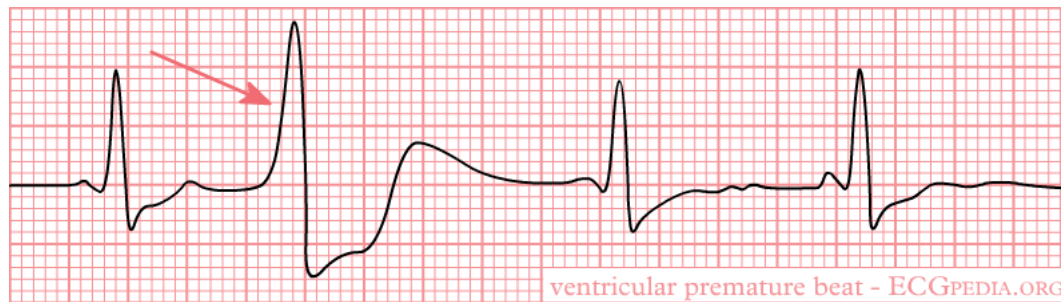
Normal rhythm 60 – 100 bpm

Bradycardia < 60 bpm

Tachycardia > 100 bpm

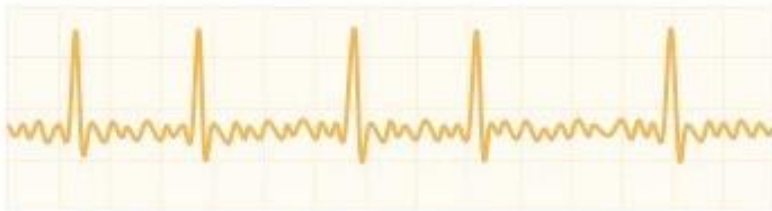


Premature atrial contraction



Premature ventricular contraction

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