Scoring Cardiac Events

Technical Specifications

- Use a single modified ECG Lead II and torso electrode placement.
- OPTIONAL: Use a single modified ECG Lead I on the torso
- Notes:
 - Additional leads may be placed if clinically indicated.
 - Increasing the image size (10 or 15-second page) on the display may improve detection of dysrhythmias.
 - Lead II is typically derived from electrodes placed on the right arm and left leg. The negative electrode can be placed below the right clavicle, and the positive electrode should be placed on the left lower chest at the anterior axillary line in 6th or 7th intercostal space.

Technical Specifications

• Notes:

- Standard ECG electrode applications are superior to EEG electrodes in minimizing artifacts.
- Lead I is typically derived from electrodes placed on the right arm and left arm, but the negative electrode can be placed below the right clavicle and the positive electrode below the left clavicle.

Rules

- Score sinus tachycardia during sleep for sustained sinus HR > 90 bpm for adults
- Score bradycardia during sleep for sustained HR <
 40 bpm for ages 6 years through adult
- Score asystole for cardiac pauses > 3 seconds for ages 6 years through adult
- Score wide complex tachycardia for rhythm lasting min of 3 consecutive beats at rate > 100 bpm with QRS duration ≥ 120 msec

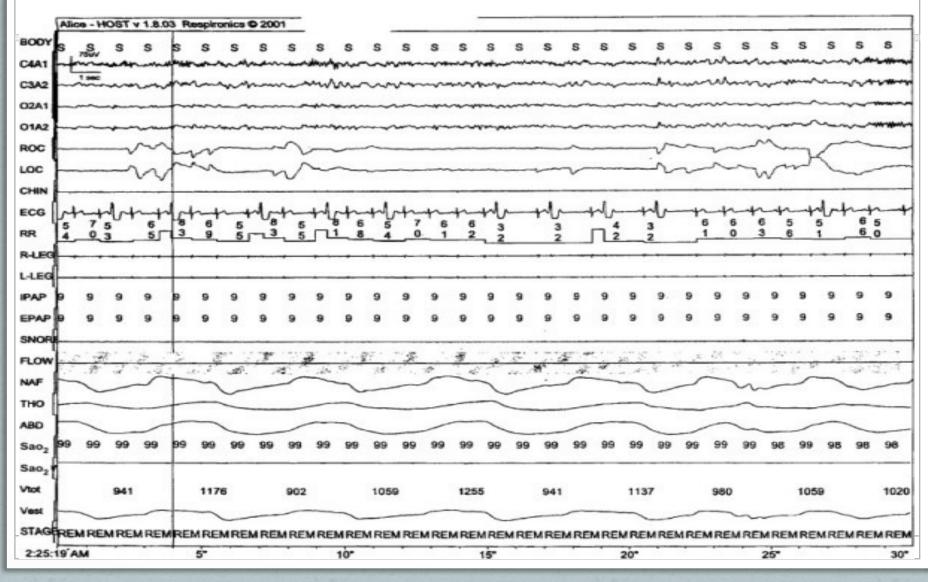
Rules

- Score narrow complex tachycardia for rhythm lasting min of 3 consecutive beats at rate > 100 bpm with QRS duration < 120 msec
- Score atrial fibrillation if there is irregularly irregular QRS complexes associated with replacement of consistent P waves by rapid oscillations that vary in size, shape, and timing
- Score 2nd and 3rd degree AV block and cardiac pacemaker rhythm

Notes

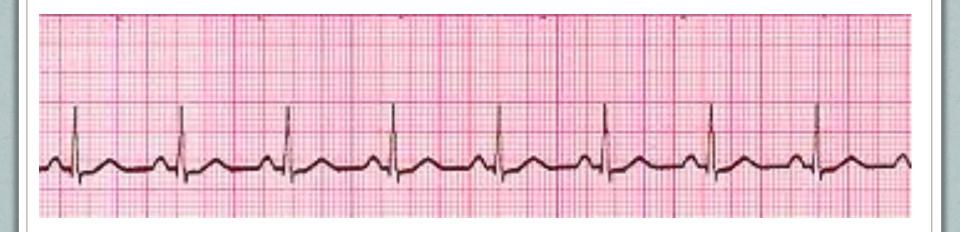
- Reporting should occur only if the quality of the signal is sufficient for accurate identification. Otherwise, a general description of the abnormality should be provided.
- Ectopic beats (PAC, PVC) should be reported.
- Use of a single ECG lead is unreliable for detecting S-T segment and T wave abnormalities.
- Sinus rates vary according to age in children
 - Faster rates in young children vs. adults
- Sustained sinus bradycardia or tachycardia is defined by > 30 seconds of stable rhythm to distinguish it from transient responses, associated SDB events or arousals
- Increasing the HFF on the display will aid in detecting atrial or ventricular pacing spikes.

Ectopic Beats

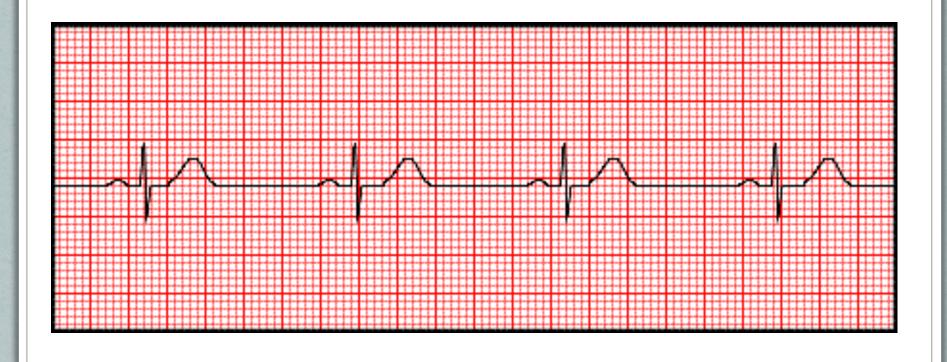


Review of Cardiac Dysrhythmias

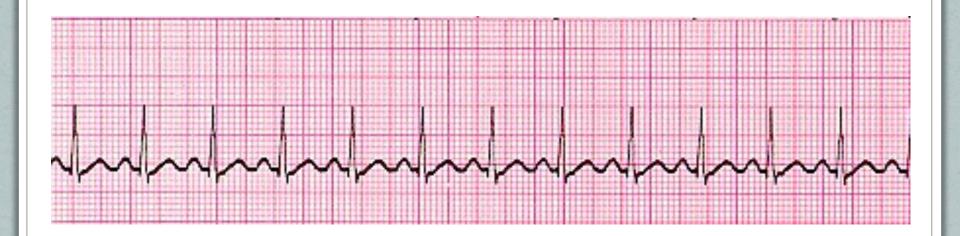
Normal Sinus Rhythm



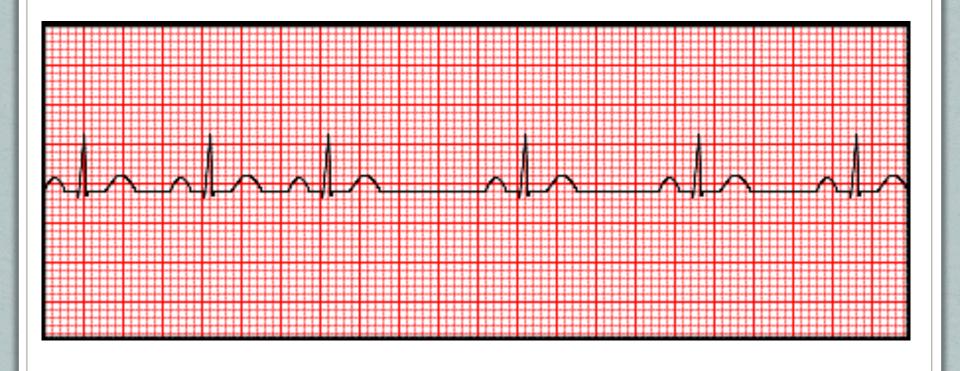
Sinus Bradycardia



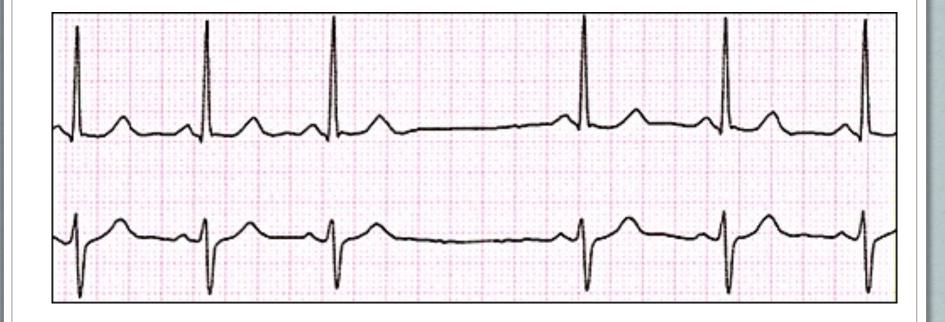
Sinus Tachycardia



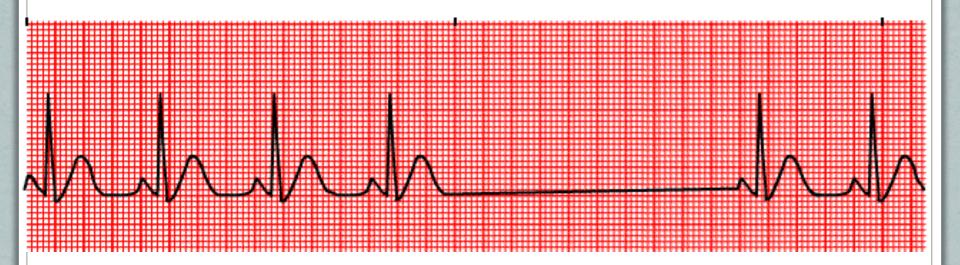
Sinus Arrhythmia



Sinus Exit Block



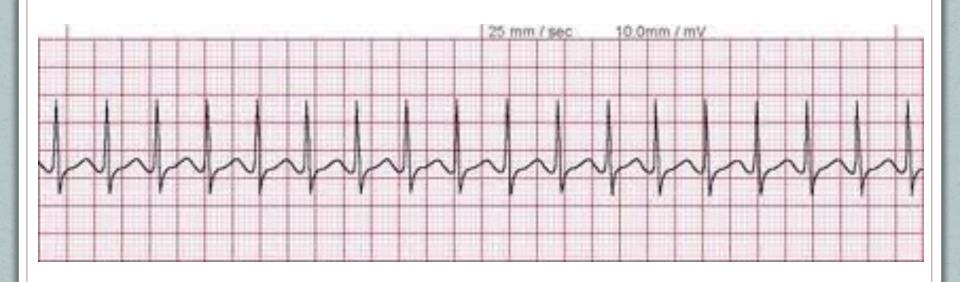
Sinus Arrest



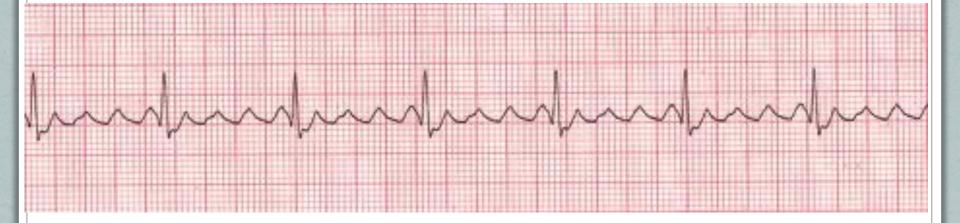
PAC



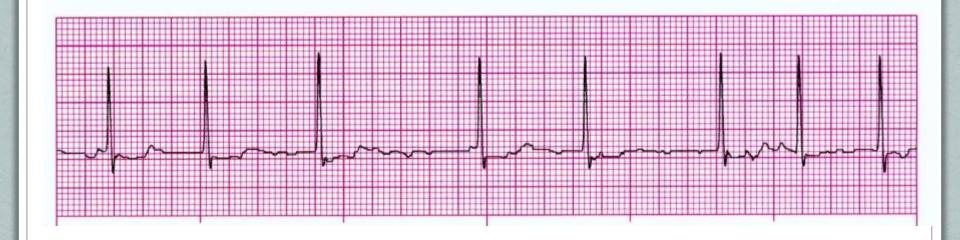
Paroxysmal Atrial Tachycardia



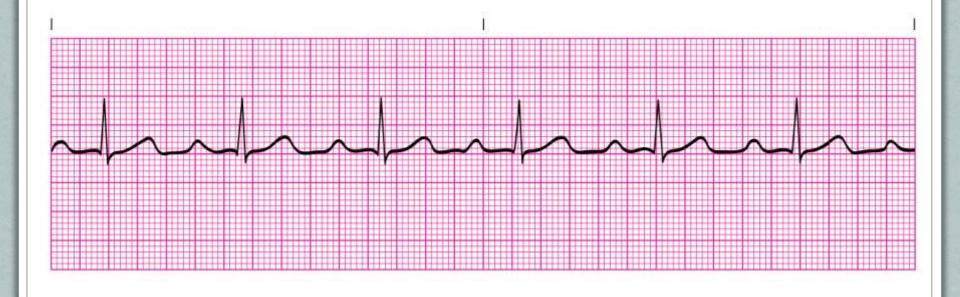
Atrial Flutter



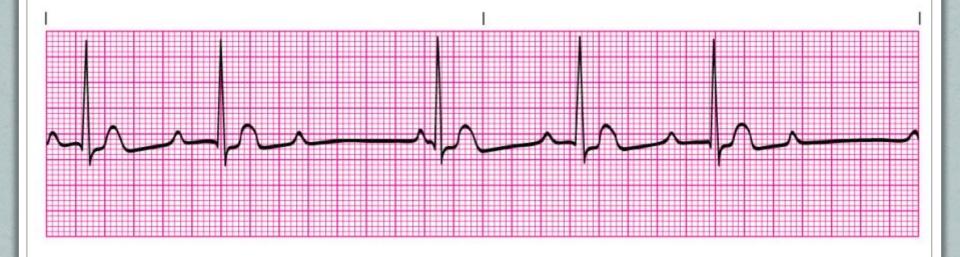
Atrial Fibrillation



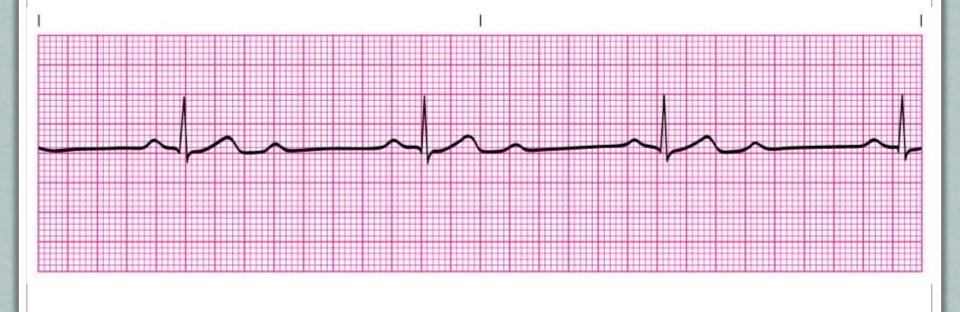
First Degree Heart Block



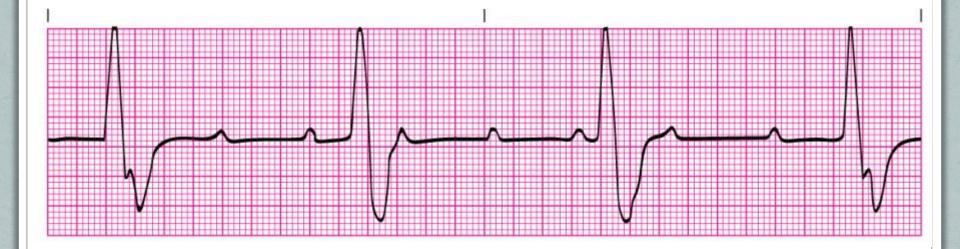
Second Degree Heart Block, Type I



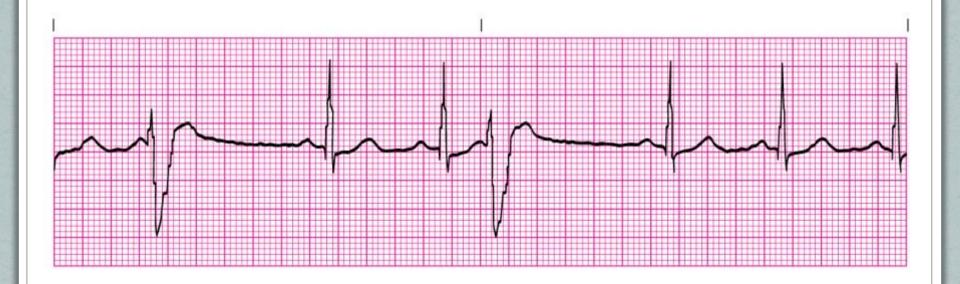
Second Degree Heart Block, Type II



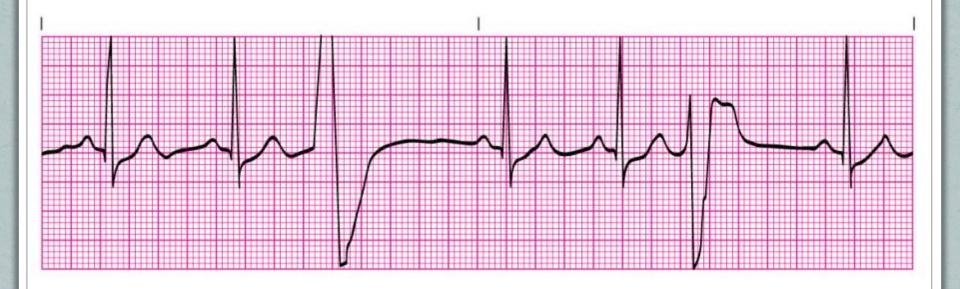
Third Degree Heart Block



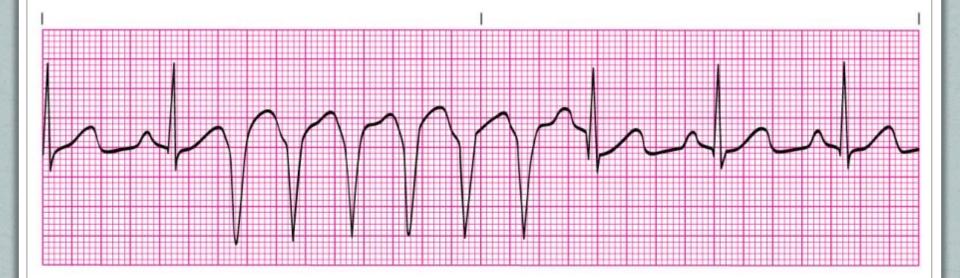
Unifocal PVCs



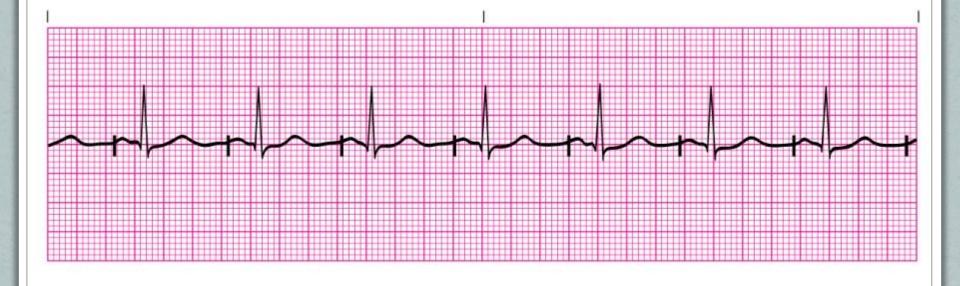
Multifocal PVCs



Run of V Tach



Atrial Pacemaker



Quadrigeminy



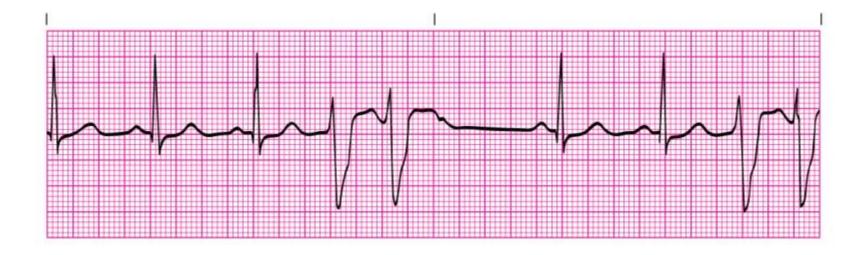
Trigeminy



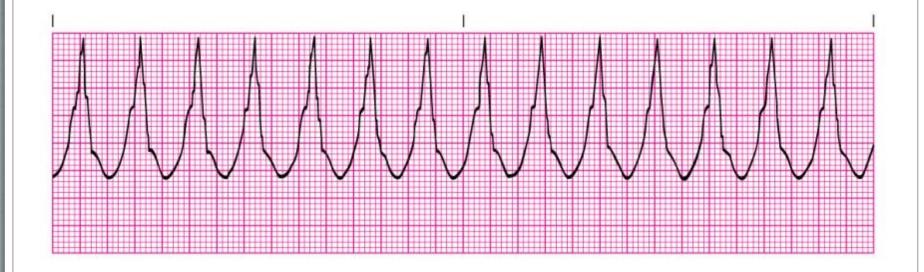
Bigeminy



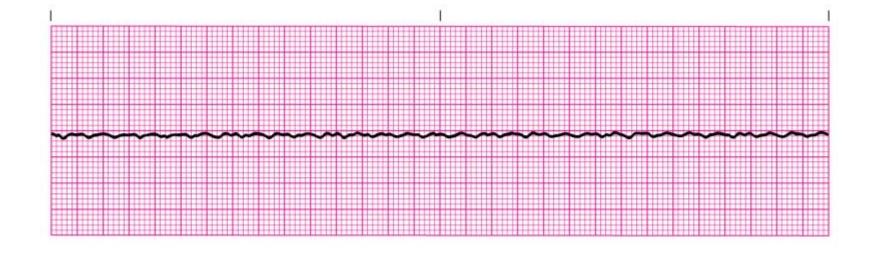
Couplets



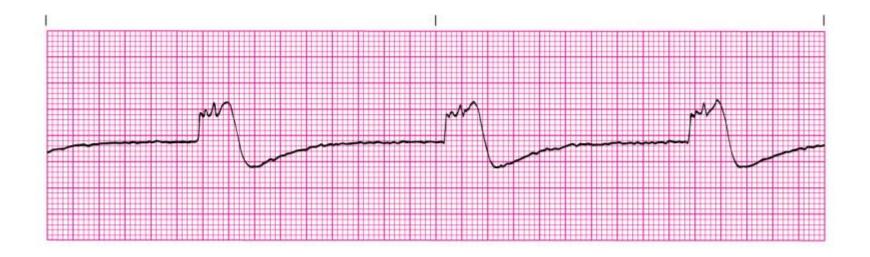
Ventricular Tachycardia



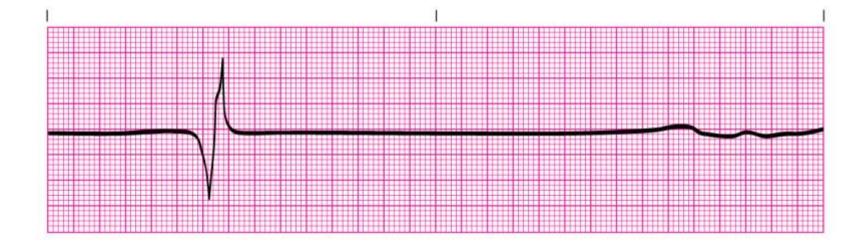
Ventricular Fibrillation



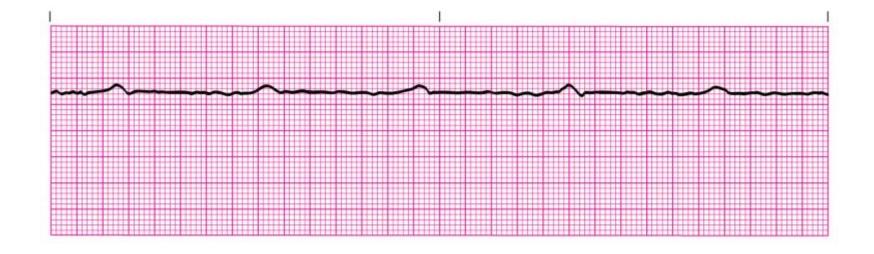
Idioventricular



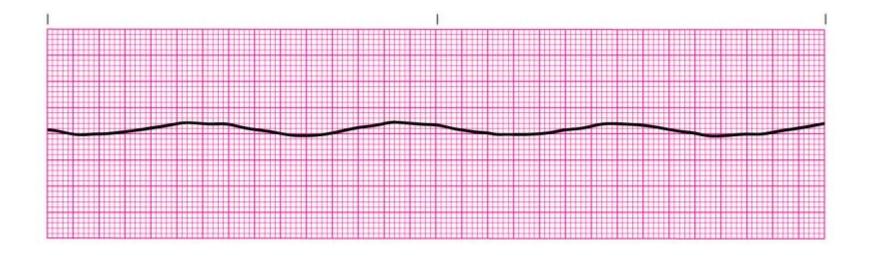
Agonal



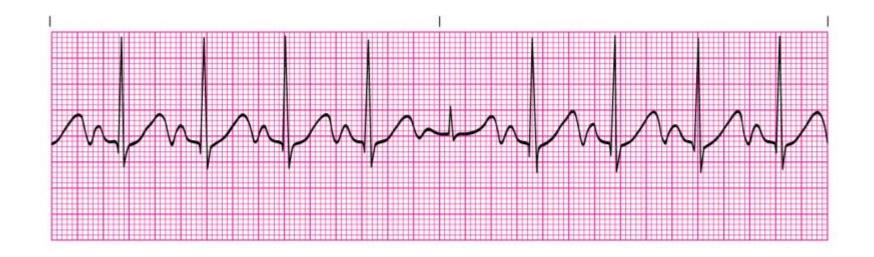
Ventricular Standstill



Asystole



Aberrantly Conducted Complex



Ventricular Pacemaker



Biventricular Pacemaker

