Everything ECG and Cardiac Rhythm Boot Camp

Course Outline

Day 1 November 19, 2019

Foundational ECG Concepts

- Anatomy of a 12 Lead ECG
- Recording of Leads
- Normal & Abnormal Waveforms
- QRS Axis
- Bundle Branch Blocks
- Hemiblocks
- Hypertrophies / ECG in hypertrophic cardiomyopathy
- Normal Variants
 - Early repolarization
 - Persistent juvenile T waves
- Medication and Electrolyte Effects
 - Potassium
 - Calcium
 - Digoxin
 - Class I and III antiarrhythmics
- Wide Complex Tachycardias
 - Use of ECG criteria for differentiating SVT with aberrancy from VT
 - Hospital monitoring guidelines / practice recommendations for dysrhythmias
 - Ventricular arrhythmia and sudden cardiac death guideline updates
 - Torsades and QT interval monitoring
 - Long QT syndrome
 - Brugada syndrome

Day 2 November 20, 2019

• The ECG and Injury and Ischemia

- ECG changes in response to injury, ischemia and infarction
- 3 Rules for Advanced ECG reading
- Q waves
- Nuances of specific types of MI
- Right ventricular and posterior leads
- ECG interpretation with BBB
- Evolutionary changes in STEMI
- Complications of STEMI
- ST segment monitoring case studies

• Myocardial Mimics

- Pericarditis
- Aortic dissection
- Pulmonary Embolus
- Subarachnoid hemorrhage

• ECG Pearls

- SVT and supply and demand ischemia
- T wave memory
- ECG recognition of accessory pathways
- The Lewis Lead in atrial arrhythmias
- Bradyarrhythmias
 - Recognition and management
 - Clinical practice guideline updates
 - Basic concepts of pacemaker technology
 - Chronotropic incompetence in heart failure