EMC 451

Study Guide for Exam 1

- Be able to name the various morphologies of QRS complexes using the nomenclature reviewed in class.
- Describe the proper location of placement of the 10 leads of the 12-lead EKG.
- Identify the components of the electrical conduction system of the heart.
- Describe the action potential and the movement of electrolytes in myocardial working and pacemaker cells.
- Name the neurotransmitters of the adrenergic (sympathetic) and cholinergic (parasympathetic) nervous systems.
- Describe how heart rate is controlled via the sympathetic and parasympathetic systems, including the relevant anatomy of those systems.
- Define vector, and describe how vectors affect the appearance of the QRS complex.
- Define electrical axis.
- Be able to determine electrical axis based upon the appearance of the QRS complex in leads I and AVF.
- List the causes of left axis deviation.
- List the causes of right axis deviation.
- List the causes of extreme axis deviation.
- List the leads used to identify inferior wall MI, lateral wall MI, anterior wall MI, and septal MI.
- Identify normal and abnormal R wave progression.
- Read and interpret 12 lead EKGs covered in this unit.