

February 7, 2017 AHD Objectives

Diagnostic Tests for CAD:

1. Describe typical angina, atypical angina, and non-anginal chest pain and describe how age and gender associated with these types of chest pain determine pretest probability of CAD. Describe how pretest probability impacts the interpretation of the results of the diagnostic test for CAD.
2. Fill in the following table:

Type of test	Advantages	Indications	Contraindications	Criteria for Abnormal Test	Sensitivity	Specificity
Exercise Stress Test						
Dobutamine ECHO						
Vasodilator stress nuclear test						
CT Calcium Score						
CT Arteriogram						
Conventional angiogram with ventriculography						

3. Know the contraindications to the pharmacologic stress agents including dobutamine, adenosine, and regadenoson.

4. Describe the Framingham risk score and how it classifies patients as low, intermediate, or high risk for MI or death from CAD over 10 years. Know how the Framingham risk score differs from the new scoring system developed in 2013 for assessment of CAD risk.

Hypertrophic Cardiomyopathy (HCM):

1. Describe the genetic inheritance pattern of hypertrophic cardiomyopathy and the histologic consequences of the abnormal proteins encoded. Know the recommendations for screening of first-degree relatives.
2. Describe the pathophysiology of HOCM (including SAM) and describe why an exercise test is mandatory in the evaluation of patients with HCM.
3. Describe the spectrum of symptoms in patients with HCM and HOCM.
4. Describe the exam findings and maneuvers that help to diagnose HOCM based on preload, contractility, and afterload. List the medications that affect preload, contractility and afterload that are contraindicated in HOCM.
5. Describe the recommendations for exercise in patients with HOCM.
6. List the 5 major risks for sudden cardiac death in patients with HCM and know the indications for ICD placement.

Heart Failure:

1. Describe the physical signs that are most predictive of a clinical diagnosis of heart failure and which physical findings may be absent. Describe the specific use of biomarkers such as BNP in the diagnosis of heart failure and the know the sensitivity of BNP in obese patients.
2. List and describe the three main etiologies of heart failure and why it is important to delineate the cause of heart failure.
3. Know the risk factors for heart failure, including the definitions and recommendations for treatment of stage A and stage B asymptomatic heart failure.
4. Describe the indications, contraindications (risks), and survival benefits for the following therapies for systolic heart failure: ACE-I, B-blockers, aldosterone antagonists, ARBs, Hydralazine and Nitrates, Digoxin, and Diuretics.
5. Describe the indications for biventricular pacers and AICDs in the patient with heart failure.