

Progression of Training and Skills Cardiology

Preamble

Cardiovascular disease is a leading cause of morbidity and mortality and the family physician should be proficient in the diagnosis and management of the commonest pathologies and knowledgeable of the others. He/she should be expert in preventive and lifestyle modifying strategies and interpretation of the electrocardiogram and appropriate interpretation of diagnostic tests. Residents, who will be involved in rural care, or working in smaller hospitals, will need to consider available resources, transport capabilities, and availability of consultation, as it applies to their chosen practice site.

Goals

- An appreciation of the important role of care of the patient with cardiovascular disease in full spectrum family medicine practice
- Expertise in primary and secondary prevention in cardiovascular disease
- Competence in the diagnosis of cardiovascular disease incorporating interpretation of common laboratory and ancillary testing
- Recognition of personal limitations and the need for appropriate consultation

Objectives

- An understanding of cardiovascular anatomy and pathophysiology
- Ability to perform appropriate cardiac history and physical examination and develop appropriate differential diagnosis and evaluation and management plans
- Knowledge and understanding of basic diagnostic procedures:
 - Mechanics and interpretation of ECG
 - Interpretation of chest radiographs
 - Treadmill/bicycle stress test monitoring and interpretation
 - Ambulatory ECG monitoring and interpretation
- An evidence-based knowledge of primary and secondary prevention and risk management
- Knowledge and understanding of therapeutics and procedures:
 - Risk management
 - Cardiopulmonary resuscitation (CPR), both basic life support (BLS) and advanced cardiac life support (ACLS)
 - Treating dysrhythmias and conduction disturbances
 - Use of external temporary pacemakers
 - Management of acute myocardial infarction, post-infarction care, and complications
 - Congestive heart failure
 - Hypertensive emergencies
- Knowledge of cardiovascular rehabilitation:
 - Psychosocial issues
 - Sexual functioning
 - Depression
 - Family dynamics

- Knowledge of management of patients after an intervention:
 - Lifestyle adjustments
 - Coronary artery bypass surgery
 - Catheter-related interventional procedures
- Ability to appreciate the role of, and cooperate with, other disciplines including nursing, pharmacy and dietetics in cardiovascular disease
- Ability to communicate in compassionate, knowledgeable manner and address complex psychosocial issues in cardiology with patients and families

Suggested Reading

Residents should note that there is required reading for this rotation.

[Feldman, H. \(2001\). A Guide to Reading and Understanding the EKG. Reviewed by Mariano Rey, MD, '76](#)

[Roongsritong, C., Warraich, I., & Bradley, C. \(2005\). Common Causes of Troponin Elevations in the Absence of Acute Myocardial Infarction. Chest. 125:5 1877-1884](#)

[Secondary Prevention for Patients with Coronary and Other Vascular Disease \(2008\). JACC. 51:2:233-237](#)

[Update of ACC/AHA 2002 Guidelines for the Management of Patients with Chronic Stable Angina \(2007\). J AM Coll Cardiol, 50:2264-2274](#)

[ACC/AHA 2007 Guidelines for the Management of Patients With Unstable Angina/Non-ST Elevation Myocardial Infarction \(2007\). J AM Coll Cardiol, 50:7:652-726](#)

[ACC/AHA 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult \(2005\). J AM Coll Cardiol, 46:1116-1143](#)

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