GOALS AND OBJECTIVES FOR PGY3 CARDIOTHORACIC SURGERY RESIDENT ON PENN-PRESBYTERIAN INTERVENTIONAL CARDIOLOGY SERVICE

Description:
Residents will spend three months on the interventional cardiology service at PPMC. Residents will function as an interventional cardiology fellow, initially performing diagnostic catheterizations, then proceeding to interventions, including coronary stent placement. This rotation will also enhance the wire skill set necessary to perform other endovascular procedures. Furthermore, residents will gain experience in deciding which coronary lesions can be revascularized with PCI vs. CABG.

(1) Medical Knowledge
1. Anatomy, physiology, and pathology of the cardiovascular system.
2. Normal and abnormal right and left heart catheter hemodynamics as they pertain to the various disease processes.
3. General knowledge of fluoroscopy, including setup, dye load, radiation safety.
4. Indications, complications, and patency rates for PCI vs. CABG for coronary artery disease and following acute myocardial infarction.

(2) Clinical Skills
1. Perform an acceptable history and physical exam concentrating on the relevant areas in interventional cardiology.
2. Manage the patient post cardiac catheterization, including the recovery room, ward, and intensive care setting, demonstrating knowledge and ability to anticipate, recognize, and manage potential complications of the disease processes and operative procedures.
3. Demonstrate understanding of right heart catheterization hemodynamics with attention to pulmonary hypertension, cardiac tamponade, and constrictive physiology.
4. Demonstrate understanding of left heart catheterization hemodynamics with attention to aortic insufficiency, aortic stenosis, Gorlin equation, mitral insufficiency, mitral stenosis, cardiac tamponade, constrictive physiology, and measurement of cardiac output with Fick method.
5. Demonstrate knowledge of coronary anatomy, coronary anomalies, indications for PCI intervention, including bare metal and drug eluting stents.

(3) Patient Care
1. Ability to obtain central venous access (femoral, subclavian, internal jugular) and arterial access (femoral, radial, brachial) with seldinger technique.
2. Ability to place an IABP under fluoroscopy guidance.
3. Ability to perform a right heart biopsy.
4. Ability to perform right and left heart catheterization hemodynamic measurements.
5. Ability to perform diagnostic coronary angiography.
6. Participate in coronary interventions (stent placement) as primary, first, or second assistant.

(4) Professionalism
1. The ability to communicate effectively with patients, their families, and other members of the health care team.
2. The ability to be honest, reliable, and respectful of the religious, racial, and gender characteristics of patients, their families, and other members of the health care team.
3. The ability to understand the psychological needs of the patient facing potentially life threatening disease and interventional cardiology.
4. The ability to give and receive advice in a manner that is consistent with the harmonious operation of a health care team.
5. An awareness of the medico-legal aspects of interventional cardiology.
6. An appreciation of the ethical aspects of interventional cardiology.
7. An understanding of the obligation of continuing self-education and teaching others.
8. The ability to keep succinct, pertinent, and current medical records.
9. The ability to recognize when to seek assistance from more experienced colleagues.
10. The ability to appreciate the importance of acquiring and maintaining an appropriate professional attitude in order to practice in any specialty.

(5) Interpersonal and Communication Skills
1. Establish therapeutic relationships with patients and families.
2. Obtain and synthesize relevant history from patients and families.
3. Listen effectively.
4. Discuss appropriate information with patients and families, and the health care team.
5. Write clear consultation note/discharge summary/clinic note.

(6) Practice-Based Learning and Improvement
1. Develop, implement, and monitor a personal continuing education strategy.
2. Critically appraise sources of medical information.
3. Facilitate learning of patients, housestaff/students, and other health professionals.
4. Contribute to development of new knowledge.
5. Read around clinical cases.
6. Participate actively in scheduled morbidity and mortality conferences.
7. Participate effectively in teaching fellow professionals including junior housestaff.

Method of assessment of resident academic performance
1. End of rotation online evaluation
2. Yearly in-service training exam.
3. Bi-annual case log review