GOALS AND OBJECTIVES FOR PGY1 CARDIOTHORACIC SURGERY RESIDENT ON CARDIAC ANESTHESIA SERVICE

Description:
Residents will spend 1 month and will learn how to perform a preoperative cardiac anesthesia workup and to manage patients intra/postoperatively. More specifically, residents will learn how to use basic cardiovascular drugs, inhalation agents, paralytics, and pain medications. Residents will become proficient with intubations and central venous access. Finally, residents will learn how to use and read transesophageal echos. Importantly, residents will learn that cardiac surgery requires a coordinated team effort, including anesthesia, perfusion, and surgery.

(1) Medical Knowledge
1. Understand pharmacology, indications, and the complications of drugs commonly used in the cardiac anesthesia, including inhalation agents, paralytics, sedative hypnotics, inotropes, antithrombotics, and pain medications.
2. Understanding general principles of preoperative anesthesia assessment.
3. Understanding pain management strategies.

(2) Clinical Skills
1. Perform an appropriate relevant history and physical exam preoperatively.
2. Demonstrate knowledge in the interpretation of laboratory investigations, CXR, and ECG.
3. Demonstrate knowledge in the performance and interpretation of transesophageal echo, both preoperatively and postoperatively.
4. Formulate anesthetic strategic plan for the given disease process.
5. Participate in the management of the patient throughout the operative procedure.
6. Ability to perform airway assessment.
7. Ability to manage common postoperative cardiac arrhythmias, including atrial fibrillation/flutter, ventricular tachycardia/fibrillation, sinus bradycardia, and asystole.
8. Interpretation of PA catheter values, as well as ability to suggest treatment strategies to improve oxygen delivery.
11. Troubleshooting pacemakers.

(3) Patient Care
1. Insertion of femoral, internal jugular, and subclavian central venous lines; insertion of radial and femoral arterial lines.
2. Insertion of PA catheters.
3. Ability to establish an airway, including oral pharyngeal and laryngeal mask.
5. Perform double lumen endotracheal intubation.
6. Placement of lumbar drain.
7. Placement of epidural catheter.
(4) Professionalism
1. 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.
2. The ability to give and receive advice in a manner that is consistent with the harmonious operation of a health care team.
3. The ability to recognize when to seek assistance from more experienced colleagues.
4. Deliver highest quality care with ethics, integrity, honesty, and compassion.
5. Exhibit appropriate personal and interpersonal professional behaviors.
6. Understand the professional, legal, and ethical codes to which physicians are bound.

(5) Interpersonal and Communication Skills
1. Listen effectively.
2. Establish therapeutic relationship with patients and families.
3. Obtain and synthesize relevant history from patients and family.
4. Inform patients and families about their condition at an appropriate and understandable level.
5. Write clear consultation notes and operative logs.
6. Prepare and present intraoperative course in an organized manner to ICU team.
7. Communicate effectively with allied health care professionals.

(6) Systems-based Practice
1. Utilize resources effectively to balance patient care and learning needs.
2. Allocate finite health care resources wisely.
3. Work effectively and efficiently in a health care organization.
4. Understand the importance and mechanisms to safely utilize resources in a cost-effective manner to benefit all patients.
5. Recommend practices to effectively utilize resources including undertaking studies to assess effectiveness of standard care procedures.

(7) Practice-Based Learning and Improvement
2. Critically appraise sources of medical information and be aware of resources available.
3. Prepare and present preoperative assessment to attending or cardiac anesthesia fellow.
4. When possible, participate actively in both cardiac anesthesia and cardiothoracic surgery scheduled morbidity and mortality conferences.
5. Actively participate in journal club.
6. Participate effectively in facilitate learning of patients, teaching house staff/students and other health professionals.

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