

Anesthesia Curriculum

Goal

Anesthesia involves preoperative, intraoperative and postoperative care of patients. It often involves elements of critical care medicine. The general internist should have basic skills in perioperative medicine, conscious sedation, pain management and airway management.

Residents will rotate for one week on an anesthesia rotation with the following goals: (1) to become familiar with basic preoperative evaluation with emphasis on assessing and reducing risk, (2) to develop basic airway management skills including use of a bag mask, LMA, and proficiency in naso/endotracheal intubation, (3) to become familiar with commonly used anesthetics and their risks, (4) to learn the appropriate procedure for conscious sedation, (5) to become familiar with different options for pain control, and (6) to participate in the evaluation and management of postoperative complications.

Objectives

Patient Care

- I. Provide care that is compassionate, appropriate and effective for patients undergoing anesthesia.

Medical Knowledge

- I. Develop the knowledge and skills to obtain a focused history on patients undergoing anesthesia, including personal or family history of perioperative complications, history of bleeding disorders, comorbidities, smoking history and medication use.
- II. Develop the knowledge and skills for performing a physical exam with particular attention to the cardiac and pulmonary systems.
- III. Develop an understanding of normal and abnormal cardiopulmonary physiology and its clinical application to anesthetic practice, including discussion of coronary artery disease, cardiomyopathy, cor pulmonale, and obstructive lung disease.
- IV. Understand the application of mechanical ventilation in the perioperative setting, including the effects of one lung ventilation and the differences between dead space and shunt.
- V. Become familiar with the clinical pharmacology of volatile anesthetic agents, hypnotics, muscle relaxants, opiates, local anesthetics, inotropes and vasoactive agents.
 - a. Review medications stocked in the carts in the operating room and understand their clinical application in anesthetic and intensive care settings.
- VI. Understand appropriate use and interpretation of preoperative studies, including:

- a. complete blood count
 - b. chemistries
 - c. coagulation studies
 - d. arterial blood gas
 - e. spirometry
 - f. chest radiograph
 - g. electrocardiogram
 - h. exercise or nuclear stress test
- VI. Develop competence in the following procedures:
- a. central line placement
 - b. naso/endotracheal intubation
 - c. use of bag mask and LMA
 - d. conscious sedation

Practice-Based Learning and Improvement

- I. Become familiar with clinical practice guidelines and information on best evidence-based practice used in the care of patients undergoing anesthesia and in pain control.
- II. Review patient care errors with attention to changes in systems to prevent recurrence.

Interpersonal and Communication Skills

- I. Communicate effectively with patients and families in a compassionate, culturally sensitive and patient-centered manner.
- II. Accurately describe the risks and benefits of proposed diagnostic and therapeutic procedures for informed consent.
- III. Ensure charting is legible, thoughtful, complete and timely to facilitate communication within the health care team.

Professionalism

- I. Understand impact of gender, age, culture, religion, and socioeconomic status on patient choices regarding anesthesia.
- II. Respect patient confidentiality.

Systems-Based Practice

- I. Develop skills in identifying opportunities for quality improvement, risk management and cost-effectiveness in perioperative care.

Teaching Methods

- I. Attending supervision of resident activities in patient care
- II. Conferences – residents are expected to attend all anesthesia educational activities occurring during their rotation.

- III. Recommended reading
- IV. Pre-test to evaluate resident's fund of knowledge with subsequent teaching tailored to results.
- V. Intubation video

Resident Evaluation

- I. Attending feedback to residents on strengths and weaknesses on a case-by-case basis
- II. Attending written evaluation of residents at the end of the rotation.

Resources

On-line Resources

- UptoDate
- MDConsult