

# COURSE OBJECTIVES ANS310Y

## **GOALS**

Upon completion of the Anesthesia Clerkship Rotation, third year medical students will understand the implications of pre-existing disease for patients undergoing anesthesia. They will demonstrate competency in basic airway management and acute resuscitation, and will be able to discuss pain management in the perioperative period.

## **A. GENERAL COMPETENCIES**

## 1. Medical Expert

The third year medical student will be able to:

- 1. Demonstrate the ability to assess a patient in the preoperative period and formulate a basic management plan.
- 2. Demonstrate the ability to take a focused history and physical examination, including anesthetic history and airway exam.
- 3. Develop a plan for preoperative investigations and interpret these investigations
- 4. Understand and explain the risks and benefits associated with regional versus general anesthesia.
- 5. Develop an approach to acute resuscitation, including appropriate fluid therapy.
- 6. Develop an approach to perioperative pain management.
- 7. Demonstrate competency in airway management and other procedural skills relevant to the perioperative period.

#### 2. Communicator

The third year medical student will be able to:

- 1. Communicate effectively and empathetically with patients and their families, and recognize their high level of anxiety.
- 2. Communicate their level of training and involvement in the patients care.
- 3. Communicate risk with high risk patients and their families.
- 4. Communicate effectively with the perioperative team noting anesthetic related concerns.
- 5. Present the preoperative assessment in a clear, concise and complete format in a timely manner.



### 3. Collaborator

The third year medical student will be able to:

- 1. Establish and maintain effective working relationships with colleagues and health care professionals.
- 2. Consult effectively with physicians and other health care professionals.
- 3. Participate effectively on health care teams, namely the Anesthesia Care Team (ACT), Acute Pain Service (APS) and Cardiac Arrest and/or Trauma Teams.
- 4. Understand the high level of collaboration (anesthesia, surgery, nursing, pharmacy, anesthesia assistants, and respiratory therapists) required for the effective management of the patient in the perioperative period.

#### 4. Leader

The third year student will be able to:

- 1. Demonstrate appropriate and cost-effective use of investigations in an evidence based manner.
- 2. Understand the prioritization of the surgical emergency patient to minimize the risk of negative outcome.
- 3. Develop an understanding of the factors contributing to resource issues in the perioperative period.
- 4. Understand the role of physicians in developing the health care system and promoting access to care. (Anesthesia Care Team).

#### 5. Health Advocate

The third year student will be able to:

- 1. Understand the risk factors that lead to increased perioperative risk and how anesthesiologists can assist in modifying these risks in the perioperative period.
- Smoking cessation
- Weight loss
- Alcohol use
- Recreational drug use



#### 6. Scholar

The third year medical student will be able to:

- 1. Retrieve information from appropriate sources related to the anesthesia curriculum.
- 2. Assess the quality of information found, using principles of critical appraisal.
- 3. Develop an approach to self-directed learning.

#### 7. Professional

The third year medical student will be able to:

- 1. Interact with patients in a compassionate, empathetic and altruistic manner.
- 2. Recognize his or her limitations and seek appropriate help when necessary.
- 3. Maintain patient confidentiality.
- 4. Understand the current legal and ethical aspects of consent for surgery, anesthesia and blood transfusion.
- 5. Understand full and honest disclosure of error or adverse events.
- Understand initiatives, such as the Operating Room Checklist, which have been undertaken to ensure patient safety and to minimize medical error in the perioperative period.
- 7. Fulfill all obligations undertaken, including educational obligations.

## **B. EDUCATIONAL CORE OBJECTIVES**

## I.Skills

At the completion of the Anesthesia Clerkship rotation, the third year medical student should be able to demonstrate basic proficiency in the following skills. These skills may be acquired during the clinical rotation, seminars or simulation day.

#### **Technical Skills:**

One of each must be attempted or completed.

- 1. Airway insertion
- 2. Cardiac monitor lead placement
- 3. Endotracheal intubation
- 4. Laryngeal mask insertion
- 5. Video Laryngoscopy
- 6. Mask ventilation
- 7. Peripheral IV insertion



## **Interpretive Skills:**

One of each must be completed.

- 1. Capnography
- 2. Cardiac Monitor
- 3. Pulse Oximetry

# **II. Problem Based Encounters**

Upon completion of the Anesthesia Clerkship rotation, the third year medical student should be able to demonstrate an approach, including differential diagnosis and management as appropriate, for the following patient encounters. These may be based on either real or simulated encounters.

## Required:

## One encounter of each is required.

- 1. Hypotension/Shock (Observe and manage with faculty or resident-simulated acceptable)
- 2. Hypoxia/Apnea (Observe and manage with faculty or resident-simulated acceptable)
- 3. Pain Management (Observe and discuss management with faculty)
- 4. Preoperative Assessment (Complete independently and discuss with faculty)

## Other encounters (not required):

- 1. Altered Consciousness/Coma
- 2. Anaphylaxis
- 3. Anemia
- 4. Arrhythmia
- 5. Cholinesterase Deficiency
- 6. Complex regional pain syndrome
- 7. Cyanosis
- 8. Delirium
- 9. Difficult Airway
- 10. Hypercarbia
- 11. Hypothermia
- 12. Malignant Hyperthermia
- 13. Nausea/ Vomiting
- 14. Obstetrical Pain Management
- 15. Pediatric Resuscitation
- 16. Regional Anesthesia
- 17. Trauma