

# CA1/CA2 Anesthesiology Resident Trauma Anesthesia Rotation

## GOALS

The purpose of the Trauma Anesthesia rotation is to expose the anesthesia residents to all aspects of trauma care from the earliest of resuscitative efforts, through intraoperative care, intrahospital transport and postoperative pain management.

Residents are responsible for the day-to-day implementation of resuscitation, airway management, intraoperative anesthesia, and immediate postoperative management in trauma patients. All procedures are carried out under the direct supervision of a senior resident and a fellow or attending anesthesiologist.

## OBJECTIVES

### I. Cognitive Objectives

At the end of the rotation the CA1/CA2 resident should be able to:

- A. Understand the core principles of trauma care: **(MK)**
  - 1. Trauma epidemiology, mechanisms of injury, and prehospital care
  - 2. Initial evaluation and management, team approach, triage, surgical priorities and mass casualty management
  - 3. Airway management, algorithms for emergency induction and intubation
  - 4. Vascular cannulation
  - 5. Shock resuscitation and fluid therapy, damage control resuscitation
  - 6. Blood component therapy and trauma coagulopathy, massive transfusion protocols.
  - 7. General anesthesia for trauma
  - 8. Regional anesthesia for trauma
  - 9. Monitoring the trauma patient
  - 10. Ultrasound and echocardiography in trauma
  - 11. Postoperative care of the trauma patient
  - 12. Chemical and radiologic exposures in trauma
- B. Identify anesthetic considerations for patients with the following blunt or penetrating injuries:
  - 1. Traumatic brain injury
  - 2. Spinal cord trauma
  - 3. Ocular and maxillofacial trauma
  - 4. Chest trauma
  - 5. Abdominal trauma
  - 6. Musculoskeletal trauma
- C. Describe the anesthetic management for the following special populations: **(MK)**
  - 1. Burn trauma patients
  - 2. Pediatric trauma patients
  - 3. Geriatric trauma patients
  - 4. Pregnant trauma patients

## II Psychomotor Objectives

At the end of the rotation the CA1/CA2 resident should be able to:

- A. Completely evaluate a trauma patient preoperatively, anticipating the need for special equipment for airway and or resuscitative management. **(PC)**
- B. Provide airway consultation in the trauma resuscitation unit or emergency department. **(PC) (ICS)**
- C. Present patients in a cohesive systematic-approach to an attending anesthesiologist and propose an anesthetic plan. **(PC) (ICS)**
- D. Thoroughly set up for an emergency case including anesthesia machine checkout, selection of routine and special monitoring devices, selection of appropriate airway equipment, selection of vascular access catheters and fluid delivery systems, choose appropriate anesthetic and resuscitation drugs, create an environment for temperature homeostasis. **(PC) (SBP)**
- E. Maintain a complete anesthetic record during all cases either hand written or with an automated, computerized record keeper. **(PC)**
- F. Develop basic communication skills with patients and family members, colleagues, nursing staff, respiratory therapists, administrative staff, and other support personnel. **(ICS) (SBP)**
- G. Perform the following procedures: **(PC)**
  - 1. Endotracheal intubation with and without inline cervical immobilization including but not limited to direct, indirect videolaryngoscopic and fiberoptic techniques on both awake and unconscious patients. (The procedure may be performed in the operating room, trauma resuscitation unit, or emergency department).
  - 2. Use of tracheal tube introducers (“gum elastic bougie”), supraglottic airways, and videolaryngoscopy (describe light wand and emergent cricothyroidotomy)
  - 3. Arterial puncture and cannulation.
  - 4. Insertion of central venous catheter (internal jugular and subclavian)
  - 5. Position a patient for common procedures with attention to pressure points and eye protection.
  - 6. Insertion of oro/nasogastric tube (list contraindications to each)
  - 7. Perform regional anesthetic blocks for extremity and other procedures for which they are indicated.
- H. Perform postop evaluation and complete QA form on all patients. **(PC) (SBP) (PBLI)**

## III Affective Objectives

At the end of the rotation the CA1/CA2 resident should be able to:

- A. Demonstrate sensitivity to patients’ culture, age, gender, and disabilities. **(PF)**
- B. Demonstrate commitment to medical records confidentiality. **(PF)**
- C. Practice cost-effective care. **(SBP)**
- D. Display caring and respectful behavior with patients and staff. **(PC)**
- E. Participate in trauma morning report. **(PBLI)**

- F. Participate in trauma QA conference. **(PBLI)**
- G. Work effectively with other team members. **(ICS)**
- H. Display judgment in knowing when to call for help. **(PC) (ICS)**
- I. Consider patient and staff safety in all patient care and planning. **(PC) (PF)**
- J. Display a willingness to acknowledge error or mistakes. **(PBLI)**
- K. Accept criticisms with the understanding that the mutual goal is to improve patient care and personal performance. **(PBLI)**
- L. Consider issues of patient flow through the medical system when coordinating care. **(SBP)**
- M. Complete rotation and faculty evaluations. **(PF)**

ACGME's General Competencies:

- PC** Patient Care
- MK** Medical Knowledge
- PBLI** Practice-Based Learning and Improvement
- ICS** Interpersonal and Communication Skills
- PF** Professionalism
- SBP** Systems-Based Practice