

Anesthesiology

Year

R-1

Location

Miami Valley Hospital (MVH)

Duration

1 Month

Faculty

Jeffrey L. Lane, MD
Scott J. Hadaway, MD, DDS
Matthew G. Kramer, MD
Antonio M. Licata, DO
William E. Glenn, MD
Marilyn K. Dearmond, MD
Jeffrey L. Hamilton, MD
Thomas C. Stan, MD
Jay Srour, MD
Erin D. Underwood, DO
Chong Zhang, MD

Description

During this rotation you will experience clinical anesthesia in a very busy and fast paced operating room. Your learning experience will include the fundamental components of airway management, preoperative assessment, basic patient monitoring, the anesthesia machine, basic intraoperative complications, and postoperative recovery/pain management. Procedural skills will include airway management and peripheral IV insertion. As with any rotation, you will learn the most by being an active participant on the clinical team. Please be punctual, ask questions, be prepared through assigned reading and show respect for the patients and others on the surgical team. Above all, your experience will lead to a greater understanding of the profession of Anesthesiology. All duty hour rules are to be followed.

General Information

Anesthesia Office: 937-208-6173
Daily Anesthesiologist In-Charge: 937-208-8576

Educational Objectives

1. The resident will become proficient in airway management.
2. The resident will learn preoperative assessment of surgical patients and anesthetic risk assessment.
3. The resident will learn to operate anesthesia machine, vaporizers, anesthesia breathing systems, scavenging systems, monitoring devices, anesthesia machine and monitoring check out.
4. The resident will learn anesthetic management, choice of anesthetic, monitoring, preinduction medication, induction of anesthesia, maintenance of anesthetic, preemptive analgesia, emergence from anesthesia.
5. The resident will learn to manage basic intraoperative complications (intraoperative hypoxemia, intraoperative hypotension, allergic reactions, positioning injuries).
6. The resident will learn procedures for postoperative recovery and pain management.
7. The resident will become familiar and be able to form regional extremity anesthetic blocks.

Competencies

Patient Care

Residents must be able to provide care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about the patient.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans, counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Provide healthcare services aimed at preventing health problems or maintaining health work with healthcare professionals, including those from other disciplines, to provide patient-focused care.
- Residents will attend surgeries as assigned by attending staff and will participate in preoperative and postoperative care of all operative patients.
- Learn basic monitoring (ECG, blood pressure monitoring with NIBP and direct arterial, pulse oximetry, capnography, temperature, central venous pressure and pulmonary artery monitoring).
- Learn and master airway management: anatomy of upper airway, Mallampati classification, neck extension, thyromental distance, oral opening, dental examination, mask ventilation, oral/nasal airway insertion, endotracheal intubation, LMA insertion, fiberoptic intubation techniques, and emergency airway techniques.

Medical Knowledge

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate sciences (e.g. epidemiological) and the application of this knowledge to patient care.

Residents are expected to:

- Demonstrate an investigatory and analytical thinking approach to clinical situations.
- Know and apply the basic and clinically-supportive sciences which are appropriate to general orthopaedic surgery.
- Know ASA classification.
- Complications of tracheal intubation.
- PACU complications: nausea and vomiting, airway obstruction, hypoxemia, hypotension, hypertension, delayed awakening.
- Acute pain management: IV analgesia, peripheral nerve block and epidural/spinal analgesia
- Discharge criteria.

Interpersonal and Communication Skills

Residents will at all times demonstrate behavior that is beyond reproach. Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, patients' families and professional associates. Residents are expected to:

- Demonstrate honest, open, civil, and effective communication with patients, staff, and colleagues (medical students, residents, and attendings).
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills.
- Elicit and provide information using effective nonverbal, explanatory, questioning and legible writing skills.
- Work effectively with others as a member or leader of a healthcare team or other professional group.

Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion and integrity.
- Be responsive to the needs of patients, society and the profession.
- Be accountable to patients, society and the profession.
- Demonstrate a commitment to ethical principles pertaining to:
 - Provision or withholding of clinical care.
 - Confidentiality of patient information.
 - Informed consent.
 - Business practices.
- Demonstrate sensitivity and responsiveness to patient's culture, age, gender and disabilities.

Practice-Based Learning and Improvement

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access online medical information, and support their education.
- Facilitate the learning of students and other healthcare professionals.

System-Based Practice

Residents must demonstrate an awareness of and responsiveness to the larger context and system of healthcare and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other healthcare professionals, the healthcare organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling healthcare costs and allocating resources.
- Practice cost-effective healthcare and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with healthcare managers and healthcare providers to assess, coordinate and improve healthcare and know how these activities can affect system performance.

General Schedule

- As dictated by Dr. Lane.
- Generally 6:00 a.m. to 5:00 p.m.
- No in house call required.

Reference List

- Basics of Anesthesia by Robert K. Stoelting, MD and Ronald D. Miller, MD
- Clinical Anesthesiology by Morgan and Mikhail
- CD-ROM/Anesthesia Primer by Jeffrey L. Lane, MD

Evaluation

- Review goals and objectives with attendings at beginning of rotations.
- Mid-rotation review.
- End of rotation written evaluation turned into Peggy Baldwin (both attending and resident).