

Vascular Anesthesia Block Rotation Objectives

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert/Clinical Decision Maker:

-Demonstrate knowledge of general internal medicine with particular reference to the cardiovascular, respiratory, coagulation systems, blood transfusion, fluid and electrolyte balance.

-Demonstrate knowledge of the principles and practice of anesthesia as they apply to patient support during vascular surgery.

-Demonstrate competence in ACLS.

-Preoperative evaluation and preparation of the vascular patient.

Atherogenesis

- Coexisting Disease
- Perioperative and Long-Term Morbidity
- Risk Assessment and Optimization

Perioperative Myocardial Ischemia

- Biology and Prevention
- Monitoring for Myocardial ischemia

Perioperative B-Blockade

Hemodynamic Monitoring

Abdominal Aortic Reconstruction

- Natural History and Surgical Mortality
- Aortic Cross-Clamping
- Aortic Unclamping
- Anesthetic Management

Thoracoabdominal Aortic Aneurysm Surgery

- Etiology and Classification
- Morbidity and Mortality
- Preoperative Preparation and Monitoring
- Anesthetic Management

Endovascular Aortic Repair

- Endovascular Technique
- Anesthetic Management

Complications and Patient Outcomes

Lower Extremity Revascularization

Acute Arterial Occlusion
Chronic Arterial Occlusion
Surgical Management
Preoperative Preparation and Monitoring
Regional versus General Anesthesia
Anesthetic Management
Postoperative Considerations

Carotid Endarterectomy

Indications
Perioperative Cardiovascular Morbidity and Mortality
Preoperative Evaluation
Anesthetic Management
Neurologic Monitoring and Cerebral Perfusion
Postoperative Considerations
Endovascular Treatment of Carotid Disease: Carotid Angioplasty-Stenting

Postoperative Management of Vascular Patients

Postoperative Pain Management
Complications

Technical Skills

Be proficient in the provision of thoracic epidural analgesia for upper abdominal and thoracic surgical procedures
Be skilled in airway management for bronchoscopy, mediastinal masses and one-lung anesthesia
Be skilled in starting large bore intravenous infusions, arterial lines and CVP and PA lines in major thoracic and vascular surgical patients

Communicator:

- demonstrate effective communication with patients and families of description of procedures, informed consent and anesthetic options and risks
- demonstrate effective communication with OR team (vascular surgeons, nurses and other members of the health care team) and postop team (ICU, PACU)
- provide clear and concise written consultation and anesthetic records

Collaborator:

- seek peri-op consultation with colleagues when required
- contribute effectively to other interdisciplinary team activities

- demonstrate ability to function in the clinical environment using the full abilities of all team members

Manager:

- manage OR time by efficiently conducting the anesthetic, continuing education and personal activities
- utilize information technology to optimize patient care and life long learning

Health Advocate:

- provide patient advocacy for various peri-operative issues (i.e., patient safety, analgesia, postoperative monitoring)

Scholar:

- demonstrate commitment to continuing personal education
- be able to critically review thoracic anesthesia literature and describe the principles of research relevant to this population
- assist in education of other members of the OR team

Professional:

- demonstrate a sense of responsibility, integrity, honesty and compassion when caring for patients
- demonstrate respect for patients and colleagues
- deliver highest quality care to patients
- practice medicine ethically consistent with the obligations of a physician
- respect the opinions of fellow consultants and referring physicians in the management of patient problems and be willing to provide means whereby differences of opinion can be discussed and resolved
- show recognition of limits of personal skill and knowledge by appropriate consulting other physicians and paramedical personnel when caring for the patient

RECOMMENDED READING MATERIAL TO BE COVERED BY RESIDENTS DURING THEIR VASCULAR ANESTHESIA ROTATION

1. Cardiovascular Monitoring; p. 1265-1362; Anesthesia (6th Edition) Miller 2005.
2. Anesthesia for Vascular Surgery; p.2051-2126; Anesthesia (6th Edition) Miller 2005.
3. Anesthesia for Vascular Surgery; p. 929-968; Clinical Anesthesia (4th Edition); Edited by Barash, Cullen and Stoetling 2001.

4. Journal of Cardiothoracic and Vascular Anesthesia.