



EDUCATIONAL GOALS AND OBJECTIVES FOR ROTATIONS ON: CARDIOTHORACIC AND PERIPHERAL VASCULAR SURGERY

Goal

The goal of the cardiothoracic and peripheral vascular rotation is to develop the knowledge, skills, and attitudes necessary to evaluate, diagnose, and manage patients with cardiothoracic and peripheral vascular disorders. Objectives will be assessed in terms of clinical knowledge, interpersonal qualities, and operative skills through evaluations by faculty, peers, students and nursing staff.

Objectives for PGY-4 Residents: At the end of the PGY-4 year, residents will:

Patient Care

- Accurately diagnose most core conditions in the SCORE curriculum and some advanced conditions, as well as initiate appropriate management for most core and some advanced surgical conditions independently.
 - Acute arterial thrombosis
 - Acute limb ischemia
 - Aortic thrombosis
 - Aortoiliac disease
 - Cerebrovascular disease
 - Compartment syndromes
 - Diabetic foot infections
 - Peripheral arterial emboli
 - Peripheral vascular disease and claudication
 - Thrombophlebitis
 - Varicose veins
 - Venous stasis/chronic venous insufficiency
 - Venous thromboembolism
 - Vascular access for dialysis
 - Venous access for long-term therapy
 - Pleural effusion/empyema
 - Pneumothorax
 - Aortic dissection
 - Arterial aneurysms—aortic, peripheral, visceral
 - Thoracic outlet syndrome
 - Renal artery disease
 - Vascular graft infections
 - Lung cancer
 - Mediastinal tumors

- Superior vena cava syndrome
- Tracheoinnominate fistula
- Nonatherosclerotic occlusive diseases
- Chylothorax
- Mediastinal cysts
- Mediastinitis
- Metastatic tumors of the lung
- Recognize and manage complex postoperative problems such as sepsis, systemic inflammatory response syndrome, and multiple organ system failure independently.
- Demonstrate proficiency in the handling of most instruments and exhibit efficiency of motion during procedures.
- Move through the steps of most operations without much coaching and make intraoperative decisions.
- Perform many of the core operations and begin to gain experience in the advanced operations.
 - Amputations—lower extremity
 - Embolectomy/thrombectomy—arterial
 - Femoral-popliteal bypass
 - Sclerotherapy—peripheral vein
 - Vena cava filter—insertion
 - Venous insufficiency/varicose veins—operation
 - Arteriovenous graft/fistula
 - Vascular exposure principles
 - Venous access devices—insertion
 - Chest tube placement and management
 - Exploratory thoracotomy—open and thorascopic
 - Partial pulmonary resection—open and throascopic
 - Pericardial window for drainage
 - Abdominal aortic aneurysm—endovascular and open repairs
 - Aortofemoral bypass
 - Arterial occlusive disease—endarterectomy
 - Carotid endarterectomy
 - Endovascular intervention principles
 - Infrapopliteal bypass
 - Mesenteric occlusive disease—operation
 - Popliteal aneurysm—repair
 - Pseudoaneurysm—repair
 - Superior mesenteric artery embolectomy/thrombectomy
 - Suprarenal abdominal aortic aneurysm—repair
 - Ultrasound in the diagnosis and management of vascular diseases

- Empyema—management
- pleurodesis
- extra-anatomic bypass
- femoral aneurysm—repair
- graft-enteric fistula—management
- infrarenal and aortoiliac aneurysm--repair

Medical Knowledge

- Have significant knowledge about many core disease in the SCORE curriculum and a basic knowledge of the advanced disease in the SCORE curriculum, and make a diagnosis and initiate appropriate initial management.
 - Acute arterial thrombosis
 - Acute limb ischemia
 - Aortic thrombosis
 - Aortoiliac disease
 - Cerebrovascular disease
 - Compartment syndromes
 - Diabetic foot infections
 - Peripheral arterial emboli
 - Peripheral vascular disease and claudication
 - Thrombophlebitis
 - Varicose veins
 - Venous stasis/chronic venous insufficiency
 - Venous thromboembolism
 - Vascular access for dialysis
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 - Pleural effusion/empyema
 - Pneumothorax
 - Aortic dissection
 - Arterial aneurysms—aortic, peripheral, visceral
 - Thoracic outlet syndrome
 - Renal artery disease
 - Vascular graft infections
 - Lung cancer
 - Mediastinal tumors
 - Superior vena cava syndrome
 - Tracheoinnominate fistula
 - Nonatherosclerotic occlusive diseases
 - Chylothorax
 - Mediastinal cysts
 - Mediastinitis

- Metastatic tumors of the lung
- Have a significant knowledge of the operative steps, perioperative care, and postoperative complications for most of the core operations in the SCORE curriculum with a basic knowledge of some of the advanced operations.
 - Amputations—lower extremity
 - Embolectomy/thrombectomy—arterial
 - Femoral-popliteal bypass
 - Sclerotherapy—peripheral vein
 - Vena cava filter—insertion
 - Venous insufficiency/varicose veins—operation
 - Arteriovenous graft/fistula
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 - Ultrasound in the diagnosis and management of vascular diseases
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 - femoral aneurysm—repair
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 - infrarenal and aortoiliac aneurysm--repair

Practice-based Learning and Improvement

- Attend conferences including Morbidity and Mortality conference, multidisciplinary tumor conference, cardiothoracic/vascular surgery conference.

- Demonstrate an effective teaching style when asked to be responsible for a conference or formal presentation.
- Look for trends and patterns in the care of patients and reads and uses sources to understand such patterns.
- Select an appropriate evidence-based information tool to answer specific questions while providing care.
- Independently practice surgical skills in a simulation environment to enhance technical ability.
- Evaluate own surgical results and medical care outcomes in a systematic way and identify areas for improvement.
- Identify probable causes for complications and deaths at M&M and/or other QI conferences with appropriate strategies for improving care.
- Begin to recognize patterns in the care of patients and look for opportunities to systematically reduce errors and adverse events.

Professionalism

- Ensure patient care responsibilities are performed and continuity of care is maintained.
- Accept responsibility for errors in patient care and initiate corrective action.
- Consistently demonstrate integrity in all aspects of care and professional relationships.
- Set an example by promoting healthy habits and creating an emotionally healthy environment for those working with them.
- Model appropriate management of personal health issues, fatigue and stress.
- Assure that others under their supervision respond appropriately to responsibilities in a timely fashion.

Interpersonal and Communication Skills

- Be capable of delivering bad news to patients and families sensitively and effectively.
- Discuss care plans with members of the health care team and keep them up to date on patient statuses and care plan changes.
- Deliver timely, complete, well organized information to referring physicians and to providers of follow-up care at the time of patient care transitions.
- Anticipate logistical issues regarding the procedure and engages members of the operating team to solve problems.
- Perform clear informed consent discussion for complex procedures.

Systems-based Practice

- Be able to efficiently arrange disposition planning for patients and take responsibility for preparing all materials necessary for discharge or transfer of patients.
- Make suggestions for changes in the health care system that may improve patient care.
- Report problems with technology or processes that could produce medical errors.