

Dalhousie University Neurosurgery

Resident Rotation Objectives: Vascular Surgery

Introduction

Neurosurgery Residents rotating on the Vascular Surgery service should develop a working knowledge of the following Core Objectives:

1. Basic vascular anatomy.
2. Pathophysiology of atherosclerosis, and its risk factors.
3. Presentation, investigation and management of:
 - a. Acute upper and lower extremity ischemia
 - b. Chronic lower limb ischemia
 - c. Cerebrovascular disease (TIAs, stroke, asymptomatic carotid disease)
 - d. Acute and chronic mesenteric ischemia
 - e. Abdominal and popliteal artery aneurysms
 - f. Deep venous thrombosis

Medical Expert

The resident will achieve and demonstrate competency in their ability to:

1. Understand the normal anatomy and physiology of the systemic vasculature.
2. Understand the pathology and pathophysiology of a range of vascular disorders, as outlined in the Core Objectives.
3. Identify the clinical features of major vascular disorders.
4. Identify and respond appropriately to vascular emergencies (e.g., ruptured AAA.)
5. Perform a complete medical history, general physical examination and vascular examination.
6. Order appropriate laboratory investigations, and interpret results obtained in context of the presenting complaint.
7. Describe cerebrovascular anatomy and interpret a range of imaging modalities.
8. Explain the blood supply to the spinal cord as it relates to repair of thoraco-abdominal aortic aneurysms.
9. Describe the presentation, diagnosis and management of TIA and stroke.
10. Describe treatment options for asymptomatic carotid stenosis.
11. Explain possible peri-operative complications of carotid endarterectomy and their possible management.

Communicator

1. Write a complete and accurate history, physical examination, differential diagnosis, plan of investigation, and treatment plan on the chart or dictate appropriate consultation letters.
2. Maintain accurate, complete, and legible progress notes in the chart.

3. Make clearly formulated consultation requests to other physicians.
4. Dictate succinct but complete discharge summaries that will be useful to the referring physician.
5. Communicate effectively and compassionately with patients and family members.
6. Interact and communicate effectively with the nursing staff and other health professionals involved with the care of patients on the service
7. Be able to describe the process of quality assurance and the role of morbidity/mortality rounds in improving care on the service.

Collaborator

1. Understand the role of the physician and contribute in an effective manner to multidisciplinary team meetings.
2. Contribute in an effective manner to multidisciplinary team meetings.
3. Develop a management plan for patients that include consultation of appropriate medical and allied health care services.
4. Work with discharge planning services to ensure the transition to home is made as smoothly as possible. This will require knowledge of available community services, such as Home Care Nova Scotia, outpatient occupational therapy and physiotherapy services.

Leader

1. Effectively manage their time, as demonstrated by punctuality and timeliness in completion of duties (e.g. patient assessments, completion of discharge summaries).
2. Effectively allocate health care resources, by choosing appropriate investigations and interventions that adhere to good standards of practice.
3. Demonstrate the ability to coordinate the management plan for patients utilizing multiple members of the health care team.
4. Demonstrate the ability to effectively manage the activities of more junior staff to further their education and contribution to the health care team.
5. Understand the importance and role of quality assurance activities.

Health Advocate

1. Develop skills in identifying important risk factors for vascular diseases and counselling patients appropriately (e.g., smoking cessation).
2. Learn the appropriate circumstances for advocating use of a variety of inpatient and outpatient care services (e.g. physiotherapy, occupational therapy, dietician services, social work, Home Care Nova Scotia, Nova Scotia Pharmacare).
3. Become aware of services and support groups available to patients affected by vascular problems (e.g., amputees) and be able to communicate these to patients.

Scholar

1. Evaluate the medical literature utilizing critical appraisal techniques. This could be directed toward specific questions arising during clinical care, presentation at journal club or presentation at clinical teaching rounds.
2. Effectively participate in the education of more junior members of the health care team or allied health care professionals. Teaching may be at the bedside during clinical care, clinical skills learning sessions or in didactic educational sessions.
3. Demonstrate an adequate understanding of the principles of research, including ethical principles.

Professional

1. Demonstrate a continuous improvement in the skills and knowledge necessary for the practice of surgery. This can be accomplished by participation in didactic and bedside educational activities.
2. Demonstrate insight into personal limitations and recognize when consultation is the most appropriate course of management.
3. Participate in self-assessment activities that evaluate the quality and ethical standard of patient care. This can be accomplished through patient care rounds with consultant and senior house staff, and participation in Mortality and Morbidity review discussions.
4. Serve as a role model with respect to knowledge, skills and attitudes for junior staff.