

# Preamble

Vascular Surgery is concerned with the diagnosis and management of congenital and acquired diseases of the arterial, venous and lymphatic circulatory systems, exclusive of the vessels intrinsic to the heart, the intracranial vessels and the thoracic aorta where surgery would require cardiopulmonary support.

This rotation will allow trainees to become familiar with common vascular disorders, in particular, related to aneurysmal disease, peripheral vascular disease, mesenteric ischemia, vascular trauma and venous insufficiency. They will also be exposed to wound healing and diabetic infections. From the technical stand point they will learn the basic surgical skills and instruments involved in vascular dissection, arterial anastomosis, and wound closure.

# JUNIOR

### **Medical Expert**

- 1. Basic vascular anatomy
- 2. Pathophysiology of atherosclerosis and its risk factors
- 3. Presentation, investigations and management of:
  - Acute upper and lower extremity ischemia
  - Chronic lower limb ischemia
  - Cerebrovascular disease (specifically TIA's, stroke, asymptomatic carotid disease)
  - Acute and chronic mesenteric ischemia
  - Abdominal and popliteal artery aneurysms
  - DVT
  - Mesenteric Ischemia (Chronic and Acute)
  - Vascular Trauma

**JUNIOR** surgical residents by the end of the rotation will be able to demonstrate the following:

- 1. how to examine the peripheral vascular system
- 2. basic interpretation of aortic, mesenteric and lower extremity arteriograms
- 3. Basic interpretation of abdominal CT scans of the aorta, visceral and extremities
- 4. Basic knowledge in the operating room of vascular anatomy and its relationships to other important structures in the groin, abdomen and neck



- 5. operative skills possibly including
  - proficient knot tying
  - dissection of vascular structures in the groin
  - saphenous vein exposure
  - opening and closing the abdomen
  - toe amputations
  - an introduction to Vascular anastomotic techniques
  - Hemostatic techniques

# Communicator

- 1. Demonstrate effective communication with patients and families characterized by understanding, trust, respect, empathy and confidentiality.
- 2. Gather information not only about disease but the patient's belief, concerns and expectations about his illness.
- 3. Be aware of the influential factors such as age, gender, ethnic, cultural and socio economic background and spiritual values that may affect the illness.
- 4. Ensures that various members of the health care team deliver consistent messages to the patient and the family.
- 5. Establish good relationship with peers and other health professionals.
- 6. Effectively provide and receive information.
- 7. Prepares documents, summaries, and operative reports that are accurate and timely.
- 8. Demonstrates the ability to handle conflict situations.

# Collaborator

- 1. Demonstrate effective interaction with health professionals recognizing their roles within the care of the patient.
- 2. Consult effectively with other physicians and health care professionals.
- 3. Contribute effectively to the inter-disciplinary team activity and meetings.
- 4. Develop care plan for the patient including investigation, treatment, and continued care in collaboration with other member of inter-disciplinary team.

# Manager

- 1. Understand the concept of resource utilization and the need for prioritization of health care delivery.
- 2. Allocate such resources wisely.
- 3. Utilize various technologies such as OACIS and PACS systems to optimize patient care and using such information to assist in decision-making.
- 4. Demonstrate effective leadership with appropriate delegation of responsibilities to other members of the house staff.





- 5. Plan for the weekly service rounds with the assignment of responsibility for presentation of subject matter and cases.
- 6. Select cases for the weekly morbidity and mortality rounds with specific emphasis on identification of systemic issues.

## **Health Advocate**

- 1. Understand the specialist role to intervene on behalf of patients on issues that may impact on their health.
- 2. Identify the important determinants of health affecting the patient.
- 3. Utilize such information in the prioritization of cases for urgent, emergent or elective access to the emergency visits.
- 4. Understand the social demographic issues which affect patient hospital stay and evaluate the patient's ability to access various support services within the health and social systems.
- 5. Understand the issues related to disease prevention and identification of risk factors, which may be modified through lifestyle change.

### Scholar

- 1. Commitment as a specialist to engage in lifelong learning in the pursuit of mastery.
- 2. Recognize and identify gaps in one's own knowledge and develop a personal learning project to correct such deficiency.
- 3. Participate actively in the Emergency Medicine evidence based Journal Club.
- 4. Critically appraise medical information and successfully integrate this information into the discussion at M&M rounds, Grand rounds and service rounds.
- 5. Utilize an evidence-based approach to the resolution of clinical problems.

# Professional

- 1. Recognize the responsibility for the overall care of the surgical patient.
- 2. Deliver the highest quality of care with integrity, understanding and compassion. Practice of surgery must be ethically consistent.
- 3. Have knowledge of and understanding of the professional legal and ethical codes to which surgeons and physicians are bound.
- 4. Develop ability to recognize, analyze and deal with unprofessional behaviors in clinical practice through knowledge of local and provincial regulations.
- 5. Demonstrate appropriate personal and inter-personal behavior.

Vascular Surgery - JGH, MUHC-RVH Site



**Objectives of Training** 

### SENIOR

#### Introduction

For General Surgery resident the vascular rotation is an opportunity to complement their evolving general surgery skill set with the knowledge and techniques required to recognize and in some cases manage vascular surgery problems as they arise in general surgery practice.

In keeping with their more advanced level of training senior general surgery residents will be given greater responsibilities such as running a vascular team on the ward when possible. Similarly in the operating room they will be expected to participate to the fullest extent of their abilities in keeping with their level of training.

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## 5. operative skills possibly including

- proficient knot tying
- dissection of vascular structures in the neck, groin, abdomen and pelvis
- proximal and distal control of arteries
- saphenous vein exposure
- opening and closing the abdomen
- toe/leg amputations
- femoral artery emblectomy
- infrarenal aortic exposure and clamping
- lower extremity fasciotomies
- Vascular anastomotic techniques
- Hemostatic techniques

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