Core Surgery
Urology Resident Objectives in Vascular Surgery
(for junior residents, PGY1 and PGY2)

Rotation Goals and Objectives

General Objectives

Typically, urology residents will do a two block rotation in vascular surgery during PGY1. The rotation is normally at St. Paul’s Hospital or Vancouver General Hospital. The urology resident is expected to fully participate in the daily functioning of the vascular surgery service and to attend all academic activities related to the Foundation of Surgery curriculum. If the vascular surgery service needs and academic obligations permit, the urology resident may attend urology grand rounds, professor’s rounds or academic half-day.

Primary objectives for junior urology residents in vascular surgery rotations are outlined below:

(a) Through elective admissions to hospital, in-patient consultations and emergency room consults, the urology resident will acquire an approach to the diagnosis and treatment of various surgical conditions. These conditions include:

- Blunt and penetrating abdominal trauma with vascular injuries
- Acute arterial insufficiency of a limb and/or organ
• Chronic arterial insufficiency of a limb and/or organ
• Deep venous thrombosis and pulmonary emboli
• Acute post-operative complications

(b) The urology resident will develop proficiency in interpreting the following diagnostic studies:

• Angiography – particularly aortic, renal and intra-abdominal vasculature
• CT-angiography – particularly aortic, renal and intra-abdominal
• Doppler evaluation of arterial system and kidneys
• Magnetic resonance arteriogram and venogram – particularly aortic, renal and intra-abdominal

(c) The urology resident will seek out all opportunities to care for patients with the following conditions;

• Aortic aneurysm – dissection or rupture
• Renal arterial diseases (atherosclerotic and fibromuscular dysplasia)
• Abdominal trauma that may involve the renal or retroperitoneal vasculature
• AV fistulas or grafts for hemodialysis

(d) The urology resident will seek out all opportunities to develop competency in the following technical procedures;

• Thorough and accurate physical exam of the peripheral vascular system
• Measure ABI
• Use of portable Doppler device for detecting peripheral pulses
• Suturing and knot tying – particularly arterial and venous anastomoses
• Use of vascular staplers
• Exposure, isolation and control of the femoral vessels
• Saphenous vein harvesting
• Closure of neck, abdominal and extremity operative incisions.
• Percutaneous access of central veins
• Creation, revision or thrombectomy of AV fistulas for hemodialysis

(e) The urology resident will focus his/her studying on material to be covered in the Royal College Principles of Surgery exam (refer to G & O for Surgical Foundations curriculum)
Urology Competencies

Medical Expert:

At the completion of the vascular surgery rotation, the urology resident will be capable of performing a history and physical exam that thorough but succinct and organized.

At the completion of the vascular surgery rotation, the urology resident will be capable of choosing and interpreting diagnostic tests in a resource-effective manner.

At the completion of the vascular surgery rotation, the urology resident will be proficient in the procedural skills outlined in the preamble.

These competencies will be taught and assessed in the following ways:

1. Attending surgeons will be knowledgeable of the rotation goals and objectives and will be motivated to ensure each resident has sufficient exposure to clinical material.
2. High volume of consultations on surgical services where residents will be the initial contact.
3. Bedside review of histories, physical signs, diagnostic testing including radiology with the attending surgeons.
4. Careful review of resident documentation (dictated consults, OR reports and discharge summaries) to teach and evaluate medical expert competencies.
5. Real-time teaching and assessment of technical skills during procedures.
6. Written ITER at the end of each block.
7. Face-to-face feedback (in real time) throughout the rotation and at the end of the block.

Communicator:

At the completion of the vascular surgery rotation, the resident will be capable of establishing a meaningful therapeutic relationship with patients and families in an elective and/or emergency setting. This will be achieved by speaking honestly, respectfully and with patience as well as listening effectively.

At the completion of the vascular surgery rotation, the resident will be capable of conveying relevant medical information to patients and families in a manner that is understandable and encourages shared decision-making.
At the completion of the vascular surgery rotation, the resident will be capable of producing verbal and dictated consultations to other clinicians that are thorough but succinct.

These competencies will be taught and evaluated in the following ways:

1. During direct patient care, the residents will have multiple opportunities to assess and speak to patients in the presence of the vascular attendings. Issues related to communication will be explicitly discussed and developed with the attending at an appropriate time.
2. All written reports (consults, OR reports, discharge summaries) will be reviewed by the attending surgeons and feedback given.

**Collaborator:**

At the completion of the vascular surgery rotation, the resident will be capable of describing the roles and responsibilities of other health care professionals that interact with vascular patients and families (including nurses, social workers, physiotherapists, occupational therapists, cardiologists, radiologists and radiology technicians).

At the completion of the vascular surgery rotation, the resident will understand inter-professional team function and demonstrate that they can work with others to minimize team conflict and optimize patient-centered care.

**Manager:**

At the completion of the vascular surgery rotation, the resident will understand the role physicians play in health care expenditures and have a practical knowledge of cost-appropriate care for common vascular conditions.

This competency will be taught and evaluated in the following ways:

1. Using case-based teaching, the resident will receive explicit instruction on the cost effective use of diagnostic tests.
2. Using case-based teaching, the resident will receive explicit instruction on prioritizing patients waiting for assessment and treatment.
**Health Advocate:**

At the completion of the vascular surgery rotation the resident will be able to advocate health promotion and disease prevention to patients at appropriate moments.

At the completion of the vascular surgery rotation, the resident will be knowledgeable regarding patients at risk for non-compliance and patients with barriers to access of care and be able to address these issues constructively.

**Scholar:**

During the vascular surgery rotation, the resident will attend all lectures and academic meetings related to the Surgical Foundations curriculum.

During the vascular surgery rotation, the resident will develop and initiate a personal study plan to prepare for the Royal College Principles of Surgery exam.

**Professional:**

During the rotation, the resident will demonstrate gracious acceptance of advice and feedback.

During the rotation, the resident will demonstrate punctuality and commitment to any reasonable deadlines required by the service.

During the rotation, the resident will demonstrate a commitment to appropriate personal behaviors, personal health and sustainable practice.