

**Vascular and Urology Workshop**  
Skills Centre, St George Hospital  
1st November 2014

VMO facilitators:

Lecture topics:

**Welcome**

0900-0915 (12 minute presentation, 3 minute discussion)

Registrar presenter: Saissan Rajendran (St George Hospital)

**Limb ischaemia**

- How can peripheral arterial disease be classified?
- What are the medical management options?
- What is the role of sympathectomy?
- Who should have angioplasty? Stents? Surgery? Thrombolysis?

0915-0930 (12 minute presentation, 3 minute discussion)

Registrar presenter: James Sant (Wollongong Hospital)

**Diabetic foot**

- How can the arterial system be investigated? What are the relative merits of each form of imaging? What are the risks of different contrast media?
- Discuss the pathophysiology of the diabetic foot.
- What are the different types of amputation?

0930-0945 (12 minute presentation, 3 minute discussion)

Registrar presenter: Ahmed Rahman (Sutherland Hospital)

**Varicose veins**

- How can varicose veins be classified?
- What is the pathophysiology of varicose veins?
- What investigations should be performed prior to surgery?
- What are the management options?

0945-1000 (12 minute presentation, 3 minute discussion)

Registrar presenter: Daniel Chan (St George Hospital)

**Aneurysms**

- What is the pathogenesis of aortic aneurysms?
- When should abdominal aortic aneurysms be repaired?
- How are endoleaks classified?
- What are the management options for peripheral aneurysms?
- What are the merits of different graft materials?

1000-1030

**Discussion by attending VMOs**

**Morning tea break (sponsored by Covidien)**

1100-1115 (12 minute presentation, 3 minute discussion)

Registrar presenter:

**Acute urological emergencies**

- What organisms are implicated in epididymo-orchitis and prostatitis and how should they be managed?
- How should priapism be managed?
- How should phimosis and paraphimosis be managed?

What is the role of bilateral orchidopexy in scrotal exploration?

1115-1130 (12 minute presentation, 3 minute discussion)

Registrar presenter: John Chang (St George Hospital)

**Urolithiasis**

How do renal calculi form, and what conditions predispose to them?

What is the role of alkalinisation? How does tamsulosin work?

What are the options for managing ureteric stones?

1130-1145 (12 minute presentation, 3 minute discussion)

Registrar presenter:

**Prostate cancer**

What are the arguments for screening for prostate cancer?

What is prostate specific membrane antigen (PSA) and what are the causes of a high PSA?

What tools are available to help predict prognosis and outcomes such as recurrence after surgery or radiation therapy?

What are the principles in performing a radical prostatectomy?

1145-1200 (12 minute presentation, 3 minute discussion)

Registrar presenter:

**Neoplasms of the testis**

How are testicular tumours classified?

What are the management options for testicular seminomas and what is their prognosis?

What are the management options for testicular non-seminomas and what is their prognosis?

1200-1230

**Discussion by attending VMOs**

## Vascular and Urology Workshop - Skills Stations (sponsored by Covidien)

Room 1:

### **Vascular anastomosis**

#### **Objectives**

By the end of the session, trainees will be able to:

1. Recognise the principles of performing vascular anastomoses.
2. Appreciate the complications of stenosis, aneurysm, fistula, infection, and thrombus associated with anastomoses.
3. Perform a vascular anastomosis.

#### **Tasks**

1. Discuss the principles of performing vascular anastomoses.
2. Discuss the complications that can be associated with vascular anastomoses.
3. Observe the session facilitator performing a vascular anastomosis using pig aortas.
4. Demonstrate how to perform a vascular anastomosis.

Vascular and Urology Workshop - Skills Stations (sponsored by Covidien)

Room 2:

## **Ureteric anastomosis**

### **Objectives**

By the end of the session, trainees will be able to:

1. Recognise the principles of performing ureteric anastomoses.
2. Appreciate the complications of stenosis, leak, fistula and infection.
3. Perform a ureteric anastomosis.

### **Tasks**

1. Discuss the principles of performing ureteric anastomoses.
2. Discuss the complications that can be associated with ureteric anastomoses.
3. Observe the session facilitator performing a ureteric anastomosis using pig ureters.
4. Demonstrate how to perform a ureteric anastomosis.

Room 3:

## **Difficult catheterisation and intermediate laparoscopy**

### **Objectives**

By the end of the session, trainees will be able to:

1. Recognise the factors which lead to difficult urethral catheterisation.
2. Develop safe techniques for trouble-shooting the difficult urethral catheterisation.
3. Recognise and understand the principles of inserting a suprapubic catheter.
4. Appreciate the complications associated with suprapubic catheterisation.
5. Perform a suprapubic catheterisation.
6. Describe the steps and perform a laparoscopic nephrectomy on a model.

### **Tasks**

1. Discuss the anatomy of the male and female urethra.
2. Discuss causes for difficult catheterisation including urethral strictures and prostatic hypertrophy.
3. Discuss techniques for trouble-shooting the difficult urethral catheterisation.
4. Discuss the complications that can be associated with suprapubic catheterisation.
5. Observe the session facilitator performing a suprapubic catheterisation using a simulated model.
6. Perform a suprapubic catheterisation using the simulated model.
7. Discuss the steps of a laparoscopic nephrectomy.
8. Perform a laparoscopic nephrectomy on a simulated model.

## Vascular and Urology Workshop - Skills Stations (sponsored by Covidien)

Room 4:

Covidien has invited a series of trainees to participate in the following session which will be held in the animal laboratory.

### **Advanced laparoscopy**

#### **Objectives**

By the end of the session, trainees will be able to:

1. Describe the steps of a laparoscopic nephrectomy and perform these in a pig model.
2. Describe the principles of managing liver trauma and perform these in a pig model.
3. Describe the principles of managing aortic trauma and perform these in a pig model.
4. Describe the principles of managing major renal trauma and perform these in a pig model.
5. Describe the principles of managing major venous trauma and perform these in a pig model.
6. Describe the principles of managing major chest trauma and perform these in a pig model.

#### **Tasks**

1. Discuss the steps of a laparoscopic nephrectomy with the session facilitator.
2. Perform a laparoscopic nephrectomy on a pig model.
3. Discuss and perform the steps of the following procedures:
  - Laparotomy for trauma
  - Packing the abdomen for trauma
  - Medial visceral rotation (right and left)
  - Nephrectomy
  - Managing IVC injury
  - Managing liver trauma
  - Managing retroperitoneal injury
  - Thoracotomy
  - Pericardial window

## Vascular and Urology Workshop - Skills Stations (sponsored by Covidien)

Room 5:

### **Viva practice**

Examples:

#### **Anatomy**

1. Discuss and demonstrate the blood supply of the foregut.
2. Discuss the branches of the abdominal aorta.
3. Discuss the anatomical relations and branches of the external carotid artery.
4. Discuss the compartments of the lower limb.
5. Discuss the anatomy of the ureter.

#### **Pathophysiology and critical care**

1. A 76 year old man presents with iron deficiency anaemia. A colonoscopy demonstrates a fungating caecal tumour. On staging CT, he has a 6.5 cm abdominal aortic aneurysm. What are your concerns? How would you manage this patient?
2. A 35 year old man presents after a motor vehicle accident. He has sustained a closed head injury requiring a decompressive craniectomy. He also has a liver laceration that is being managed non-operatively. How would you manage his venous thromboembolism risk?
3. A 65 year old woman presents with malaena. She is on warfarin for atrial fibrillation, and had an endovascular aortic graft placed last year. The warfarin is reversed with prothrombinex and fresh frozen plasma. At gastroscopy there is massive bleeding. What are your concerns? How do you manage her?
4. A 40 year old man presents after being trapped by his legs under brick rubble on a construction site. The extrication time was 80 minutes. What are your concerns? How do you monitor for compartment syndrome of the lower limbs?
5. A 35 year old man presents with a scrotal mass. What are your differentials? How do you manage him? How do you classify testicular tumours?

#### **Operative**

1. Control of the abdominal aorta
2. Fasciotomy
3. Ligation of the greater saphenous vein