# Phase III Care of the Surgical Patient - Core Presentations & Learning Outcomes

Please refer to the notes on Moodle on how to use these

#### Core presentation / learning outcome

### Cardiovascular

#### Core presentations

#### • Limb claudication

#### Peripheral vascular disease

By the end of Phase 3 students should be able to:

- recognise the possibility of aortic aneurysm and initiate appropriate investigations
- recognise the possibility of aortic aneurysm rupture and arrange immediate management
- recognise claudication and rest pain, and be able to explain the causes and management (including lifestyle changes) to patients
- describe peripheral angiography to a patient
- recognise venous disease of the lower limb and discuss with patients the treatment options including the indications for surgery
- recognise Raynaud's Phenomenon, initiate basic investigation and give appropriate advice to patients

## Ear, Nose & Throat (ENT)

#### **Nasal Disease**

- assess and initiate appropriate management of epistaxis
- recognise and manage rhinosinusitis
- identify the possibility of a septal haematoma after nasal trauma
- recognise deviation of the nasal septum
- recognise sinusitis and outline its appropriate investigation

• explain to patients the use of rigid and flexible endoscopy for patients with nasal, sinus and pharyngeal symptoms

## Eyes

#### Core presentations

Chronic visual loss

#### Cataract

By the end of Phase 3 students should be able to:

- recognise the symptoms and signs of cataract
- recognise the factors that predispose to cataract
- outline to patients the potential benefits and complications of cataract surgery
- detect congenital cataract and make early referral to prevent blindness

## Gastrointestinal

#### Core presentations

- Acute Abdominal pain
- Chronic Abdominal pain
- Bleeding from the GI tract
- Change in bowel habit
- Swallowing problems / Dysphagia
- Jaundice
- Diarrhoea
- Enlarged liver
- Lump in the groin
- Abdominal distension
- Vomiting
- Bleeding from the GI tract / melaena
- Perianal disease

## Dysphagia

By the end of Phase 3, students should be able to:

- recognise the symptoms suggestive of benign and malignant oesophageal strictures and achalasia
- arrange appropriate initial investigations
- explain the rationale for upper gastro-intestinal endoscopy and contrast radiography, and the associated risks and benefits

## Jaundice and hepatomegaly

By the end of Phase 3 students should be able to:

- distinguish pre-hepatic, hepatic, post-hepatic jaundice on clinical and biochemical grounds
- distinguish between infectious and mechanical causes of biliary obstruction
- initiate and interpret appropriate investigations for a patient with jaundice
- initiate and interpret appropriate investigations for patients with suspected hepatitis
- explain the procedure and rationale for ERCP and its associated risks and benefits
- consider intra-abdominal malignancy as a cause for jaundice, enlarged gallbladder or hepatomegaly
- distinguish the common causes of hepatomegaly on clinical grounds
- initiate investigations for hepatomegaly
- recognise the manifestations of chronic liver disease including encephalopathy and portal hypertension
- recognise the situations associated with acute hepatic failure, the signs of hepatic failure and initiate immediate management
- communicate to a patient that he/she is drinking alcohol to excess and outline the potential consequences

#### Ascites

By the end of Phase 3 students should be able to:

- detect ascites clinically
- initiate appropriate investigation having regard to the likely causes
- initiate management of hepatic ascites

#### Anorectal disease

- distinguish common causes of rectal bleeding on the basis of history and examination
- initiate appropriate investigation for a patient presenting with rectal bleeding
- recognise the potential causes of anal symptoms, including haemorrhoids, anal fissure, perianal fistulae, abscesses
- appropriately perform and interpret a digital rectal examination
- initiate appropriate investigation of patients presenting with anorectal symptoms

• describe the options available for management of haemorrhoids

#### Bowel cancer

By the end of Phase 3 students should be able to:

- recognise the possibility of colonic cancer in patients with disturbed bowel habit, rectal bleeding or anaemia
- initiate appropriate investigations to confirm the diagnosis and extent of disease
- suggest a prognosis based on staging and other factors
- outline the possible management strategies for bowel cancer
- outline to a patient the management of a colostomy

#### Acute abdominal pain

By the end of Phase 3 students should be able to:

- elicit important clinical symptoms and signs that assist in the diagnosis of causes of acute abdominal pain
- recognise localised and generalised peritonitis and distinguish the common causes
- initiate and interpret appropriate investigations in a patient with acute abdominal pain
- investigate, assess and initiate management of acute pancreatitis
- appreciate the common causes of pain in the right iliac fossa and how they may be distinguished
- recognise the presentation and radiological appearance of bowel obstruction
- initiate appropriate investigations for bowel obstruction and initiate intravenous fluid replacement and appropriate pain relief
- appreciate the causes of a ruptured viscus and how they may be distinguished
- recognise the radiological appearance of intra-peritoneal air (pneumoperitoneum)
- recognise the radiological appearance of a correctly (and incorrectly) placed naso-gastric tube

#### Hernias

- understand the anatomical factors that produce a potential defect at the common hernia sites
- recognise the common ways in which hernias present
- define hiatus hernia with reference to anatomical type, and outline the approaches to management
- detect hernias in the anterior abdominal wall, femoral and inguinal region with confidence
- recognise the common complications of hernias
- explain to patients the general approach to treatment

## Homeostatic

#### Core presentations

- Fluid and electrolyte abnormalities
- Lump in the neck

### Diabetes in special situations

By the end of Phase 3 students should be able to:

- outline the management of childhood diabetes
- liaise with an anaesthetist regarding diabetic control before, during and after surgery
- outline the management of diabetes in pregnancy

## Electrolyte abnormalities

By the end of Phase 3 students should be able to:

- outline the potential causes for abnormalities of sodium, potassium or calcium
- initiate appropriate investigation for patients with abnormalities of sodium, potassium or calcium
- initiate management of these conditions

### Infectious disease

#### Infection control

By the end of Phase 3 students should be able to:

- recognise those conditions that require isolation in hospitals
- apply the principles of infection control and explain these to patients
- act appropriately to limit spread of infections
- classify operative procedures with reference to their infectious complications (clean, potentially contaminated, contaminated and dirty)
- use aseptic technique where appropriate
- scrub up and put on sterile gowns and gloves

## Renal

### Core presentations

• Chronic voiding difficulty/incontinence

- Dysuria
- Haematuria
- Urinary retention
- Scrotal swellings/pain
- Loss of libido/impotence

#### Haematuria

By the end of Phase 3 students should be able to:

- distinguish upper urinary tract causes from lower urinary tract causes of haematuria
- recognise the possibility of urinary tract tumours in both adults and children
- arrange appropriate referral of patients presenting with possible urinary tract tumour
- recognise the need for cytology and biopsy procedures and explain these to the patient
- outline the management of bladder and kidney tumours
- recognise glomerulonephritis as a cause of haematuria

#### Prostate cancer

By the end of Phase 3 students should be able to:

- recognise the possibility of prostate cancer from clinical presentation and on rectal examination
- debate and advise patients on the potential for screening for the disease by PSA testing
- outline to patients the therapeutic options for prostate cancer
- recognise the need for cytology and biopsy procedures and explain these to patients
- recognise the possibility of prostate cancer in patients with symptoms and signs remote from the prostate gland

#### Obstructive uropathy

- carry out an appropriate clinical assessment of a patient presenting with lower urinary tract symptoms
- consider that renal failure may result from renal tract obstruction
- assess the causes of obstructive uropathy on clinical grounds and by appropriate use of investigations
- diagnose prostatic enlargement
- describe the appropriate use of investigations including cystoscopy, contrast imaging and other radiological techniques
- manage obstructive uropathy associated with chronic retention (by the passage of a urinary catheter)
- outline the management of obstructive uropathy and outflow tract symptoms

- discuss with patients the operation of transurethral resection of prostate
- offer simple advice to patients with voiding difficulty

#### Urinary tract stone disease

By the end of Phase 3 students should be able to:

- diagnose stone disease on clinical grounds and by means of simple investigations
- investigate the cause
- outline treatment options to patients

#### Urinary incontinence

By the end of Phase 3 students should be able to:

- distinguish the common types of urinary incontinence clinically and by simple investigation
- make appropriate referral for further investigation and management
- communicate results to a patient and outline the management options available

### Problems of external genitalia of men

By the end of Phase 3 students should be able to:

- recognise phimosis, paraphimosis, priapism and erection difficulties
- identify hydrocele, varicocele and epididymal cyst and distinguish them from testicular tumour and inguinal hernia
- recognise the possibility of testicular tumour on clinical examination and make appropriate referrals
- outline to patients the treatment options for seminomas and teratomas
- consider the causes of pain in the scrotum
- consider the diagnosis of acute testicular torsion and the differential diagnosis of epididymo-orchitis and make appropriate referrals
- identify the important causes of erectile dysfunction and outline its management

## Sexually transmitted infections

- demonstrate their ability to identify the important causes of:
- genital discharge
- genital pain
- rashes and lesions of the genitalia
- genital pruritus

- take a sexual history in which consideration is given to the variety of sexual practice, the strictly confidential nature of the consultation and to the diverse manner in which sexual infections may present
- elicit sensitively normal and abnormal findings in the genitalia and use these to test diagnostic hypotheses
- use investigations selectively to confirm diagnostic hypotheses
- formulate an appropriate management plan for patients diagnosed with sexually transmitted infections
- use effective communication skills to inform the patient of the diagnosis, the prognosis and an outline of treatment
- discuss the importance of contact tracing and ways of limiting the spread of infection
- describe the team approach needed to control the spread of sexual infection in the community

## Skin

#### Core presentations

- Pigmented skin lesions
- Skin ulcers
- Skin lumps

### Skin malignancy

By the end of Phase 3 students should be able to:

- explain to patients the dangers of excessive sun exposure
- describe the mechanisms by which ultra-violet light leads to the development of skin malignancies
- recognise pre-malignant and malignant skin conditions, including basal cell carcinoma, Bowen's disease (intra-epidermal carcinoma), squamous cell carcinoma and malignant melanoma
- appropriately refer patients with suspected or possible skin cancer
- examine a patient with skin malignancy with particular reference to the detection of spread of the disease
- outline the approach to prognosis for patients with malignant skin conditions
- describe to patients in outline the potential benefits and possible side effects of surgery and radiotherapy
- work effectively with the rest of the multidisciplinary team in the care of patients with disseminated skin malignancy

## Chronic ulcers of the leg

By the end of Phase 3 students should be able to:

• recognise the common underlying aetiological factors predisposing the development of chronic leg ulceration, including particularly venous and arterial insufficiency and initiate appropriate investigations

- diagnose the cause of chronic leg ulcers using appropriate history, examination and investigations
- describe the advantages of and contraindications to pressure bandaging; identify appropriate local dressings and describe the role of community nurses in management
- recognise the complications of chronic leg ulcers including cellulitis and contact dermatitis
- initiate appropriate referrals in these cases

## Women's Health

#### Core presentations

- Breast lump
- Breast tenderness / pain

#### Breast disease

By the end of Phase 3, students should be able to:

- assess clinically the likelihood of cancer in patients presenting with a breast symptoms
- explain to patients the role of ultrasound and fine needle aspiration in the diagnosis of breast disease
- request mammography appropriately
- participate in the staging of breast cancer and discuss these with patients
- describe the difference between carcinoma in situ and invasive carcinoma
- outline the treatment options for patients with breast cancer, including potential benefits and possible side effects of surgery, radiotherapy, chemotherapy and hormonal therapy
- access the results of trial evidence on screening and on the management of breast cancer
- outline the causes and management of breast pain
- outline the causes and management of nipple discharge

## General

### Core presentations

- The patient needing pain control
- The pre-operative and post-operative patient

Pre-operative assessment

By the end of Phase 3 students should be able:

- outline the framework of obtaining consent, exploring ideas, concerns, expectations with due regard for respecting the autonomy of a patient
- demonstrate understanding of the requirements of a valid informed consent or refusal of treatment including the assessment of capacity, the provision of information and measures taken to avoid coercion
- to order appropriately pre-operative investigations, depending on the type of procedure and the patient's comorbidities
- to recognise patients who have an increased risk of peri-operative morbidity and mortality
- to participate in the pre-operative work-up regimes for high risk patients
- to liaise with the anaesthetist in the management of a diabetic patient having surgery

#### General anaesthesia

By the end of Phase 3 students should be able to:

- recognise the properties of some of the commoner drugs used in anaesthesia and their side effects
- perform venous cannulation competently
- recognise some of the complications which may occur during an anaesthetic including the effects on blood pressure, bradycardia and tachycardia, myocardial infarction, aspiration of stomach contents
- care for an unconscious patient

#### Post-operative management

By the end of Phase 3 students should be able to:

- treat post-operative nausea and vomiting
- describe the likely causes and initiate management of post-operative confusion
- identify the likely causes of post-operative fever and initiate appropriate investigation and management
- recognise and initiate management of post-operative respiratory failure
- describe the importance of effective post-operative analgesia
- manage patient-controlled analgesia and epidural analgesia and their side effects
- prescribe appropriate analgesia in the post-operative period having regard to the operation and to appropriate doses, routes of administration, side effects and contra-indications

### Critical care monitoring

By the end of Phase 3 students should be able to:

• recognise the need for central venous cannulation and the associated complications

- recognise the radiological appearance of a misplaced central venous catheter (on a chest radiograph)
- recognise the need for monitoring a patients' central venous pressure (CVP)
- recognise the need for pulmonary artery catheterisation and its uses
- use and interpret pulse-oximetry
- recognise the need for cardiac monitoring

#### Airway management

By the end of Phase 3 students should be able to:

- recognise the likelihood of airway obstruction in the seriously ill patient
- recognise airway obstruction in the unconscious patient
- create a clear airway by appropriate position and suction
- administer oxygen appropriately
- insert a Guedel airway in the unconscious patient
- maintain an airway in the unconscious patient and perform positive pressure ventilation using a "bag and mask"
- appreciate the use of laryngeal mask airway and understand its benefits and limitations
- · recognise the need for endotracheal intubation and its complications
- identify a misplaced endotracheal tube on a chest radiograph (CXR)
- recognise the need for emergency and elective tracheostomy
- recognise the appearance of lung/lobar collapse on chest radiography
- recognise the appearance of a foreign body on chest radiography

#### Blood transfusion and fluid replacement

By the end of Phase 3 students should be able to:

- organise and deliver a safe and appropriate blood transfusion (see Blood & Lymph)
- act to reduce the need for blood transfusions and transfusion requirements generally
- be able to calculate the daily fluid requirement for children and adults allowing for the effect of disease, surgery and trauma
- initiate and monitor fluid replacement appropriately

### Incontinence (urinary and faecal)

- assess incontinence by history and physical examination
- be able to arrange investigations including appropriate use of charting and urodynamics

Care of the Surgical Patient – Core Presentations & Learning Outcomes (2020 cohort)

• institute management of incontinence