WARWICK
MEDICAL SCHOOL

# MB ChB Phase II

# Learning Outcomes

Academic Year 2026/2027

Student name: _____

# Phase II Learning Outcomes

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# Introduction

## Overview

This document aims to give overall guidance to what you should be learning during Phase II (Year 2) and your summative assessment will be based on these learning outcomes, including AB1, AB2, AB3, CCE and the different Themes you have learnt about. The document helps as a resource to plan your learning now, and for your revision before the summative assessment at the end of the Phase II year.

The Warwick MBChB curriculum consists of blocks (such as AB1, AB2, AB3 or CCE) as well as Themes (such as Social and Population). Each Phase of the course, and therefore each Phase examination, will contain outcomes relating to particular blocks but also to these Themes you have been taught about. Where possible, these are integrated in terms of both learning and assessment especially as some Theme outcomes are met during clinical exposure rather than in specific sessions relating to the Theme. However, all the learning outcomes relate to the 'GMC Outcomes for graduates 2018', of which the three components are listed below.

## Outcomes for graduates (2018)

- Outcomes 1: Professional values and behaviours
  - Professional and ethical responsibilities
  - Patient safety and quality improvement
  - Dealing with complexity and uncertainty
  - Safeguarding vulnerable patients
  - Team working

- Outcomes 2: Professional skills
  - Communication and interpersonal skills
  - Diagnosis and medical management
  - Using information effectively and safely

- Outcomes 3: Professional knowledge
  - Applying biomedical scientific principles
  - Applying psychosocial principles
  - Health promotion and illness prevention
  - Health service: understanding and working in the NHS
  - Clinical research and scholarship

## Assessment

Overall, you should expect the balance of the summative assessment to be in approximate proportion to learning time in the Phase. Therefore, just over a quarter will be material learnt in AB, with a further quarter being based on your clinical experience, Trust / GP learning and case-based learning in each of the three blocks of CCE (Medicine, Surgery and Specialties). Medical learning is not modular, and material learnt in Phase I will be included when it relates to and provides the basis for the learning you have undertaken in Year 2.

# Academic Block Learning Outcomes

## Introduction

The 11 week academic block is divided into three; Academic Block 1 (AB1) 7 weeks, Academic Block 2 (AB2) 2 weeks, and Academic Block 3 (AB3) 2 weeks. Throughout the academic blocks you will build on your learning from Phase I and prepare for the Core Clinical Education placements that follow each academic block. During CCE you will continue to develop your skills in history taking, examination and most importantly the life- long skill of learning from patients.

## AB1 Week 1: Endocrine Conditions

Overview: Students should be able to:

- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of endocrine disease including diabetes
- Begin to form basic investigation and management plans for patients with endocrine disease
- Support and motivate the patient's self-care by helping them to recognise the benefits of a healthy lifestyle and motivating behaviour change to improve health and include prevention in the patient's management plan

These L.O.s will be covered in the lectures A-C. Their additional L.O.s are listed below each session

### A. Diabetes Type 1 & DKA

- Revise the classification of diabetes
- Recognise the differences between type 1 and 2 diabetes
- Revise the pathogenesis of diabetic ketoacidosis (DKA) in T1DM
- Recognise and describe symptoms and signs in DKA
- Begin to form basic investigation and management plans for patients with DKA

### B. Diabetes Type 2

- To be able to formulate and implement an evidence-based, multi-factorial, patient-centred Diabetes Care Plan
- To promote knowledge, skills and attitudes in patients that promote patient empowerment toward high standards of diabetes care and remission

### C. Endocrine conditions

- To revise the hormones synthesised by pituitary gland and their downstream effectors
- To understand the endocrine causes and management of unintentional weight loss
- To understand the endocrine causes and management of unintentional weight gain
- To gain an overview into the pathophysiology and pharmacotherapy of obesity

These sessions will cover elements of the following CCE Presentations:

**Fatigue (Medicine)**

**Weight loss (Medicine)**

**Sessional L.O.s**

**D. Requesting consent (VLE)**

- Respect patients' wishes about whether they wish to participate in the education of learners.
- Demonstrate the knowledge of how to gain consent to perform an examination or simple test.

**E. Update on diabetes drugs**

- Describe the major oral antidiabetic medications and their mechanisms of action
- Understand how therapeutic insulin is introduced
- Know the pharmacological management of type 2 diabetes and common antidiabetic drug side effects
- Be aware of other drugs commonly used to treat diabetic complications

## AB1 Week 2: Chronic Health Conditions

- Explain the relationship between psychological and chronic physical conditions
  This L.O. will be primarily covered in the **CBL case Bob** but also comes into many of the other lectures.

**Sessional L.O.s**

**A. Acute coronary syndrome**

- Explain the common signs and symptoms of cardiac ischaemia.
- Explain the differential diagnosis of cardiac chest pain.
- Explain the difference between stable angina and acute coronary syndrome (ACS).
- Recognise and be able to explain differences between unstable angina, NSTEMI and STEMI.
- Explain the principles of diagnosis of acute coronary syndrome.
- Describe the ECG changes of acute coronary syndrome.
- List the complications of acute coronary syndrome.
- Explain pericarditis and how to differentiate this from ACS.
- Outline the principles of primary and secondary prevention of coronary artery disease.

**B. Advanced Care Planning (VLE)**

- Describe and apply the legal principles that are used to distinguish between, develop and implement advance care planning (ACP) and advance decisions to refuse treatment (ADRT).
- Describe the ethical tensions that can arise when developing and implementing advance statements (decision/requests/recommendations) regarding medical treatment and care.
- Describe the practical differences between ACP, ADRT and the ReSPECT process; and between these and having a Lasting Power of Attorney for health and welfare.
- Describe current professional guidance on ACP, ADRT, and Cardiopulmonary Resuscitation recommendations.

**C. Back pain**

This session starts to cover the CCE L.O. **Lower back pain and sciatica (Surgery)**

- Recognise and describe symptoms and signs to be look for in a patient who presents with back pain
- Begin to form a basic investigation and management plans for patients with back pain

**D. Chronic kidney disease**

This session starts to cover the CCE L.O **Chronic kidney disease (Medicine)**

- Recognise and describe the symptoms and signs and explain the relevant underlying scientific process of chronic kidney disease
- Begin to form basic investigation and management plans for patients with chronic renal disease

**E. Heart failure**

- Recognise the symptoms and signs and explain the relevant underlying scientific process of developing chronic multisystem disease such as heart failure
- Begin to form appropriate basic investigation and management plans for patients with heart failure

**F. Introduction to GP**

- To understand the workplace-based assessment and learning opportunities
- To understand the structure of general practice placements
- To know how to prepare for general practice

**G. Low mood (Depression)**

This session starts to cover the low mood aspect of the CCE L.O. **Altered mood/ psychosis (Specialities)**

- Recognise and describe symptoms and signs of depression
- Begin to form basic management plans for patients with depression including appropriate investigations and assessments as well as demonstrate an understanding of how to assess the needs and support required for people with mental health conditions

**H. Psychiatry history taking/Mental State Examination**

- Recognise and describe symptoms and signs of depression and be able to perform a mental state examination

## AB1 Week 3: Frailty & Confusion

- Begin to form appropriate basic investigation and management plans for patients with confusion
- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of developing confusion
- Explain how normal human structure and function and physiological process differs in the older age group, including the concept of frailty
- Demonstrate the ability to work collaboratively with other health and care professionals / organisations when working with patients, particularly those with multiple morbidities, frailty and long term physical and mental conditions
- Be able to perform a cognitive state examination and understand the importance of assessing the mental capacity of a patient

The above L.O.s will be primarily covered by the **CBL case Edna** and the **Delirium** & **Frailty lectures**

**Sessional L.O.s**

**A. Acute kidney injury**

This session start to cover the **CCE L.O. Acute kidney injury (Medicine)**

- Recognise and describe the symptoms and signs and explain the relevant underlying scientific process of acute kidney injury

**B. Antimicrobial resistance (CTB)**

- Describe the mechanisms of action of the major classes of antimicrobial agents
- Explain the mechanisms of bacterial antimicrobial resistance
- Describe how antimicrobial resistance genes can be transferred between bacteria
- Outline approaches to tackling antimicrobial resistance

**C. Antimicrobial stewardship (CTB)**

- Define & list the principles of antimicrobial stewardship (AMS)
- List strategies, tools & resources that can assist with AMS
- List common situations for antimicrobial resistance (AMR) to occur
- Describe the clinical management of unresponsive or drug-resistant infections (e.g. SSTIs & UTIs)

**D. Change in bowel habit**

This session starts to cover the CCE L.O. **Change in bowel habit (Surgery)**

- Recognise and describe the symptoms and signs (including red flags) and explain the relevant underlying scientific processes that cause a change in bowel habit
- Begin to form basic investigation and management plans for patients with a change in bowel habit

**E. Communication skills – interviewing a simulated patient**

- To be aware of and better able to communicate clearly, sensitively and effectively with patients by:
    - Listening, sharing and responding.
    - Demonstrating empathy and compassion.
    - Demonstrating effective verbal and non-verbal interpersonal skills.
    - Making adjustments to their communication approach if needed

- To be aware that there are no hard and fast rules about how to communicate with patients.

**F. Delirium**

This session starts to cover the CCE L.O**. Confusion (acute and chronic) (Specialities)**

- Begin to form appropriate basic investigation and management plans for patients with confusion
- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of developing confusion
- Be able to perform a cognitive state examination and understand the importance of assessing the mental capacity of a patient

**G. Frailty**

This session starts to cover the CCE L.O**. Frailty (Specialities)**

- Explain how normal human structure and function and physiological process differs in the older age group, including the concept of frailty
- Demonstrate the ability to work collaboratively with other health and care professionals / organisations when working with patients, particularly those with multiple morbidities, frailty and long term physical and mental conditions

**H. UTI (CTB)**

- Apply knowledge of host microbe interactions, host risk factors for infection and bacterial pathogenesis to urinary tract infection (UTI)
- List the common causative organisms of UTI
- Apply the principles of (microbiological) diagnosis to UTI
- Define the terms empirical, targeted and prophylactic therapy
- Apply principles of anti-microbial use to the treatment of UTI

**CAI sessions – see CAI Moodle pages for separate L.O.s**

Async: Intro to CAI in AB1

Async: CAI Watch It: Venous & Arterial Access

CAI Watch-It: Medical Imaging Vascular and Cardiac

## AB1 Week 4: Healthcare in the community

- Understand the complex medical needs, goals and priorities of vulnerable patients and the factors that can affect health and wellbeing including the environmental, social, behavioural and cultural factors which influence health and disease
- Begin to demonstrate the ability to work collaboratively with other health and care professionals / organisations when working with patients, particularly vulnerable groups of patients
- Describe the role of quality-adjusted life years (QALYs) in the allocation of healthcare resources, and use ethical reasoning to evaluate the strengths and weaknesses of this approach to resource allocation

### A. Climate change and health

- Understand what is meant by climate change
- Describe how climate change acts as a determinant of health
- Recognise the disproportional impact of climate change on vulnerable populations
- Understand the concept of planetary health
- Outline the health sector's contribution to climate change
- Describe how you can mitigate climate change as a doctor and an individual

### B. GI Infection (CTB)

- Define terms associated with gastrointestinal infections
- Describe common syndromes of gastrointestinal infection
- List common organisms causing infection syndromes in the gastrointestinal tract (viral, bacterial & parasitic)
- Apply the principles of microbiological diagnosis to infectious diseases of the gastrointestinal tract
- Apply the principles of management of infection to gastrointestinal infection syndromes

### C. Health needs assessment (SocPop)

- To define HNA and understand its importance
- To define need, supply and demand
- Know one framework for carrying out a health needs assessment
- Have considered strengths and weaknesses of the three approaches to HNA
- Understand where HNA fits into planning in health care & public health

### D. Homelessness (SocPop)

- Outline the importance of access to healthy housing for the health service
- Identify what is meant by the terms 'homelessness', 'statutory homelessness', 'rough sleepers' and 'sofa surfers'
- Outline the main causes of homelessness
- Be aware of signs of 'modern day slavery'
- Outline some of the main health needs of homeless people
- Identify the kinds of services that homeless people need access to
- Recognise and work to alleviate the prejudices faced by homeless patients from the health service

**E. Liver pathology (CTB)**

- Recognise and understand liver physiology and the pathological changes that can affect the liver
- Identify key features of the history and examination in patients presenting with common liver conditions
- Describe what clinical, laboratory and radiological investigations would be appropriate to investigate a patient with liver disease (including liver function tests) and explain how these would support a diagnosis

**F. Migrant health (SocPop)**

- Define the terms 'Asylum Seeker' and 'Refugee'
- Understand the different models for understanding influences on migration and health
- Understand the burden of disease and its relationship with migration patterns
- Be aware of the 'tools' available in order to provide inclusive healthcare

**CAI sessions – see Moodle pages for separate L.O.s**

CAI: Venous and arterial anatomy groupwork
Async: CAI: Pelvic and urinary

## AB1 Week 5: Cancer & Palliative Care

- Recognise and describe symptoms and signs of cancer and explain the relevant underlying scientific process including principles and knowledge relating to anatomy, biochemistry, cell biology, pathology and genetics applying and integrating this into patient care
- Recognise how treatment and care can place an additional burden on patients and make decisions to reduce this burden where appropriate, particularly where patients have multiple conditions or are approaching the end of life
- Describe how health care professionals can communicate sensitively and effectively with patients especially when sharing news about a patient's condition that may be emotionally challenging for the patient and those close to them

**Sessional L.O.s**

**A. Cancer and the Cell Cycle (CTB)**

- List phases of the cell cycle and define the functions of each component
- Understand control mechanisms used during the cell cycle
- Understand how cell cycle control mechanisms are deregulated during cancer

**B. Clinical reasoning (Communication & Clinical skills)**

- Understand the processes involved in problem-solving and making a diagnosis.
- Start to demonstrate *clinical reasoning* to arrive at a justifiable diagnosis

**C. Death and Dying (Community)**

- Discuss demographic and attitudes about death in the UK
- Discuss the importance of prognostication and identify tools that may assist with this
- Discuss the importance of communication and documentation in palliative care
- Identify the principles of the management of care at the end of life

**D. DNA damage and the hallmarks of cancer (CTB)**

- Describe the causes and types of DNA damage
- Describe the mechanisms of DNA repair
- Outline the consequences of failure of DNA repair
- Describe the molecular and cellular hallmarks of cancer

**E. GP Groupwork**

- Know common general practice presentations
- Understand the nature of general practice

**F. Histology of the haematolymphoid system (CTB)**

- Integrate an understanding of the histological structure of the haematolymphoid system with its physiological function

**G. Human Behaviour (PPD)**

- Understand environmental and cultural influences on human behaviour
- Define stereotyping and unconscious bias, and how these concepts differ from prejudice and discrimination
- Describe how gender and ethnicity contribute to differential experiences for patients and doctors
- Explain the CBT model for understanding an individual's thoughts, feelings and behaviour
- Describe how change affects us and apply this to the care of patients

**H. Introduction to palliative care (Community)**

- Define Palliative and End of Life Care
- Identify and discuss the holistic approach in palliative care
- Discuss the importance of early recognition, impeccable assessment and appropriate treatment in palliative care
- Describe the concept of total pain
- Discuss the importance of multidisciplinary teamworking in palliative care

**I. Lung Cancer (CTB)**

- Recognise and describe symptoms and signs of cancer and explain the relevant underlying scientific process including principles and knowledge relating to anatomy, biochemistry, cell biology, pathology and genetics applying and integrating this into patient care

**J. Molecular Biology of Cancer (CTB)**

- Describe the polygenic nature of cancer
- Explain the role of specific oncogenes and tumour suppressor genes in carcinogenesis
- Describe the role of the tumour microenvironment in cancer
- Describe the mechanisms by which metastasis occurs
- Outline how degree of cellular differentiation relates to severity of cancer (grading and staging)

**K. Neoplasia (CTB)**

- Describe the alterations in growth in neoplasia
- Describe and compare benign and malignant tumours
- Define dysplasia
- Distinguish between in situ and invasive malignancy
- Describe the basic histopathological types of benign and malignant neoplasms
- Define metastasis and routes of metastasis
- Introductory understanding of the aetiology of malignant neoplasms

L. **Palliative Care Groupwork (Community)**
- Identify members of the palliative care team
- Apply the total pain model to a patient case
- Consider some of the emotions that resident doctors might experience when caring for an end of life patient
- Identify strategies and support mechanisms they may access to help them cope with the emotional challenges of caring for palliative and end of life patients
- Identify the importance of eliciting patient's values and wishes about end of life care
- Consider how a doctor's own values about end of life care may conflict with those of their patient's

M. **Pain on inspiration**

This session starts to cover the **CCE L.O Pain on inspiration (Medicine)**
- Describe the common and important differential diagnoses for pain on inspiration (pulmonary embolus, pneumonia, pneumothorax)
- Identify features of the history and examination relevant to each of the common and important differential diagnoses of pain on inspiration
- Identify red flags relating to respiratory symptoms
- Describe what bedside, clinical, laboratory and radiological investigations would be appropriate to investigate a patient with pain on inspiration and explain how these would support a definitive diagnosis
- Explain the principles of management for common and important differential diagnoses

**CAI sessions – see CAI Moodle pages for separate L.O.s**

Async: CAI WI: Medical imaging – lymphatic drainage routes
Async: CAI: Watch It: Abdomen

## AB1 Week 6: Maternal Health

- Explain the relevant underlying scientific processes that occur with common diseases in pregnancy
- Describe the routine screening assessment of antenatal care and explain the rationale behind each aspect.
- Understand the principle of managing the normal labour process.
- Describe the changes that occur during puerperium and the importance of postnatal care.

These L.O.s will be covered in the following sessions:

A. **History, examination and antenatal care**
B. **Labour**
C. **Maternity health quiz**
D. **Maternal health groupwork**
E. **Physiology of pregnancy**

These sessions also start to cover the CCE L.O.s listed below.

**Infant feeding problems (Specialities)**
**Labour (Specialities)**
**Normal pregnancy/ antenatal care (Specialities)**

A. **Concordance (SocPop)**
   - Definition of concordance, compliance and adherence.
   - Outline the factors affecting concordance in general.
   - Consider factors important in the achievement of concordance.
   - Identify main health challenges in adolescence.
   - Identify link between brain development and risk taking.
   - Explain why self-managing Type 1 diabetes can be challenging in adolescence.
   - State reasons given by children and young people with diabetes for poorer concordance with treatment.
   - Explain the how gender can affect self-management.

B. **Refusal of treatment decisions by minors with capacity (VLE)**
   - Describe and apply the legal principles governing the judgement of when/whether to respect a refusal treatment by legal minors and be able to name and outline relevant statutes, cases and guidance that give rise to these principles.
   - Describe and apply GMC guidance relevant to refusal of consent of legal minors with capacity.
   - Demonstrate an understanding of the diverse and potentially conflicting values that inform the judgements about how best to serve the interests of legal minors and can affect treatment decisions for children and young people.
   - Recognise and summarise some of the ethical issues that can arise when treating children and young people, and be able to apply ethical reasoning to these, including identifying common sources of potential ethical tensions.

C. **Update on O&G (maternal health) drugs**
   - Describe the mechanisms of action for drugs involved in menstrual disorders and medical termination, and nitrous oxide in labour

**CAI sessions – see CAI Moodle pages for separate L.O.s**

CAI: Lymphatic Drainage groupwork
Async: CAI: Clinical anatomy of the eye
Async - CAI: Watch-It: Medical imaging: Neuroimaging

## AB1 Week 7: Child Health & Adolescence

Demonstrate an understanding of newborn screening and assessment

- Recognise and describe normal developmental milestones in childhood
- Recognise and describe common childhood illnesses and the scientific basis of common congenital childhood conditions.

**Sessional L.O.s**
Sessions B, C and D start to cover the **CCE L.O.s: Abnormal development / developmental delay (Specialities)** and **The sick child (Specialities)**

**A. Common newborn problems**

- Be able to identify concerning conditions such as cyanosis, respiratory distress (grunting) and fits in the newborn.
- To describe the clinical, laboratory and radiological investigations appropriate to investigate a newborn baby, where appropriate.
- To explain the principles of management of common conditions found in the newborn e.g. jaundice, prematurity.
- Be able to take a pregnancy and birth history, including investigations and interventions needed.

**B. Child Health Groupwork**

- To understand how to carry out a routine examination of the newborn.
- To describe the screening tests carried out in the newborn.
- Understand normal development and what constitutes delayed development
- Identify key features of a developmental history and red flags in history/examination
- To be aware of common childhood infection and immunisation issues

**C. Childhood infections**

- Recognise and describe key signs and symptoms of common childhood illnesses
- Identify red flags in history/examination
- Begin to form basic investigation and management plans for common childhood illnesses

**D. Making treatment decisions for minors without capacity (VLE)**

- Describe and apply the legal principles governing parental consent and refusal of consent for legal minors, and be able to name and outline relevant statutes, cases and guidance that give rise to these principles
- Describe and apply current professional guidance on treatment of children who lack capacity to consent
- Demonstrate an understanding of the inter-relationship between parental/family interests and the interests of the child in making treatment decisions for young children
- Explain the importance of seeking parental consent before treating children and young people without capacity
- Demonstrate an understanding of the diverse and potentially conflicting values that inform the judgements about how best to serve the interests of legal minors and can affect treatment decisions for children and young people
- Recognise and summarise some of the ethical issues that can arise when treating children without capacity, and be able to apply ethical reasoning to these, including identifying common sources of potential ethical tensions
- Describe and apply GMC guidance in relation to procedures performed for non-medical reasons on children

**E. Trauma and early life adversity**

- Understand the concepts of trauma and adverse childhood experiences
- Define adverse childhood experiences (ACEs)
- Understand evidence in relation to health impacts of trauma and ACEs
- Explain underlying biological mechanisms and changes associated with toxic/ chronic stress
- Evaluate the evidence in relation to ACE screening
- Examine evidence in relation to protective factors

**CAI sessions – see CAI Moodle pages for separate L.O.s**

CAI: Eye & neuro groupwork

## AB2 Week 1: Cardiovascular conditions

- Begin to form basic investigation and management plans for patients with atrial fibrillation and other common or important cardiac conditions
- Describe the risks associated with atrial fibrillation; evaluate the benefits and risks for patients starting anticoagulation medication for atrial fibrillation and communicate this risk effectively with patients

**Sessional L.O.s**

**A. Acid-base imbalance**

- Take a history of symptoms, medication history and past medical history.
- Carry out an examination eliciting key clinical signs.
- Describe the causes of respiratory alkalosis / acidosis and causes of metabolic alkalosis / acidosis
- Describe bedside, clinical, laboratory and radiological investigations.
- Describe the initial management of patients with specific acid base imbalances

**B. Cardiac arrythmias (Moodle book resource)**

- Review the physiology of action potentials
- Review the normal ECG
- Present principles of the classification of arrhythmias
- Practice a structured approach to diagnosing arrhythmias on the ECG
- Recognise and describe symptoms and signs of developing arrhythmias
- Begin to form basic investigation and management plans for patients with common or important cardiac conditions

**C. Drugs to treat arrythmias (PPT)**

- Explain the principles that underlie treatment of disorders of heart rhythm
- List the major classes of anti-arrhythmic drugs
- Describe the mechanisms of action of the major classes of anti-arrhythmic drugs
- Begin to form basic investigation and management plans for patients with atrial fibrillation and other common or important cardiac conditions

**D. ECG 1 groupwork (CTB)**

- Explain the difference between stable angina and acute coronary syndrome (ACS).
- Explain differences between unstable angina, NSTEMI and STEMI.
- Explain the principles of diagnosis of acute coronary syndrome.
- Describe the ECG changes of acute coronary syndrome.
- List the complications of acute coronary syndrome.
- Explain pericarditis and how to differentiate this from ACS**.**

**E. Emergency drugs for acute cardiovascular and respiratory conditions (PPT)**

- Describe the mechanisms of action for common drugs used IV to restore cardiac function and rate
- Describe the mechanisms of action behind the use of adrenaline to treat acute anaphylaxis
- Describe the mechanisms of action for common fibrinolytic drugs used to treat acute ischaemic conditions

**F. Errors in Thinking (PPD)**

- Understand how people think in daily life, and the factors that can affect thinking
- Describe the benefits and pitfalls of human thinking in medicine
- Gain a toolkit for picking up and avoiding errors in medicine

**G. GP Audit groupwork**

- Describe how clinical audit differs from research and evaluation
- Describe the clinical audit cycle
- Plan a clinical audit

**H. Oral anticoagulants (PPT)**

- Describe the common & important oral anticoagulant drugs and their mechanisms of action
- Begin to form basic investigation and management plans for patients with atrial fibrillation and other common or important cardiac conditions
- Describe the risks associated with atrial fibrillation; evaluate the benefits and risks for patients starting anticoagulation medication for atrial fibrillation and communicate this risk effectively with patients

**I. Practical considerations for the clinical audit**

- Explain why audit is important.
- Understand the requirements of the CCE2 GP audit.
- Find and access appropriate resources to assist in the CCE2 GP audit.

**J. Tel/video comm skills (Communication skills)**

- Recognise the key differences in communicating with patients face to face, by video and by telephone and be aware of these differences when they communicate with patients remotely.
- Be able to safely pass on information to a colleague, verbally, when making a referral or asking for advice.
- Recognise that the patient-centred communication skills learned for face-to-face consultations remain important with a few differences, such as lack of visual cues if telephone consultation and difficulties with eye contact in a video consultation.

This week there are sessions that start to cover CCE L.O.s listed:

**Deteriorating patient (Medicine)**
**Dizziness (Medicine)**
**Headache (Medicine)**

**CAI sessions – see CAI Moodle pages for separate L.O.s**

Neck anatomy part 1 groupwork
Asynch: Neck anatomy part 1

- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of developing arrhythmias such as atrial fibrillation

**Sessional LOs**

**A. Social Stigma & Mental Health (SocPop)**

- Describe what is meant by the term social stigma
- Outline different forms of social stigma
- Identify some conditions/impairments associated with social stigma
- Mental illness and social stigma
- Identify how people with mental illness can experience negative attitudes and discrimination
- Have a basic understanding of how MIND supports people with mental health illness

**B. ECG 2 Groupwork (CTB)**

- Present principles of the classification of arrhythmias
- Practice a structured approach to diagnosing arrhythmias on the ECG
- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of developing arrhythmias.
- Begin to form basic investigation and management plans for patients with atrial fibrillation and other common or important cardiac conditions.

**C. Hypertension**

- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of hypertension, the epidemiology and the associated risks of hypertension and how to apply the principles of primary, secondary and tertiary prevention of disease
- Begin to form basic investigation and management plans for patients with hypertension

**D. Substance misuse**

This session will start to cover the **CCE L.O. Substance misuse (Specialities)**

- Describe the neurophysiology and brain changes that occur in addiction
- Describe key features in the history and examination findings that would support the development of appropriate differential diagnoses of substance misuse.
- Describe what clinical, laboratory and radiological investigations would be appropriate to investigate a patient with substance misuse.
- Explain the principles of management of substance misuse

This week there will also be sessions that start to cover the CCE L.O.s:

**Generalised anxiety disorder, Phobias & OCD (Specialities)**
**Altered mood/psychosis (Specialities) - Psychosis** covered in this week
**Fits/seizures (Medicine)**
**Limb weakness (Medicine)**

**CAI sessions – see CAI Moodle pages for separate L.O.s**

Neck anatomy part 2 groupwork
Asynch: medical imaging thorax
Asynch: Neck anatomy Part 2

## AB3 Week 1: Infectious Diseases & Viruses

- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of common and important viral infectious diseases and of infections affecting the immune system
- Apply the principles and knowledge relating to immunology and microbiology to care of those with viral infections
- Begin to form basic investigation and management plans for patients' fever of unknown origin including appropriate investigations
- Begin to form basic investigation and management plans for patients with infectious viral diseases

**Sessional L.O.s**

**A. Blood typing & principles of transfusion (CTB)**

- List the ABO and Rh genes and antigens
- Explain ABO and Rh genetics
- Describe ABO and Rh grouping in the laboratory
- Explain manual vs electronic cross match
- Understand the term "universal donor"
- Understand processes around blood transfusion

**B. Burden of infectious disease (SocPop)**

- Describe the impact of infectious disease on global mortality
- Outline the public health importance of infectious disease of global health importance, specifically HIV, malaria and tuberculosis
- Define what is meant by emerging diseases, and give examples
- Outline contemporary issues that affect the burden on infectious disease
- Describe the features and public health issues relating to influenza and measles in the UK

**C. Common Viral Infections and Treatments (CTB)**

- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of common and important viral infectious diseases and of infections affecting the immune system
- Apply the principles and knowledge relating to immunology and microbiology to care of those with viral infections
- Begin to form basic investigation and management plans for patients with infectious viral diseases

**D. Communicable disease (SocPop)**

- Describe the basic concepts of communicable disease, including what is meant by the chain of infection, incubation, communicability, latent period, features of infectious agents (infectivity, pathogenicity, virulence) and features of the host (exposure, susceptibility)
- Know the different modes of transmission of infectious disease
- Distinguish, in relation to infectious disease, between the terms sporadic, endemic, hyperendemic and pandemic
- Define what is meant by an outbreak and describe the steps required in outbreak management, and which agencies may be involved in the UK
- Define surveillance, and distinguish between surveillance and research
- Understand specific types of surveillance, including active, passive, sentinel and syndromic surveillance, and be able to give examples of each
- Describe what is meant by a notifiable disease and be able to give examples

**E. Fever of unknown origin (CTB)**

- Recognise and describe symptoms and signs and explain the relevant underlying scientific process of common and important viral infectious diseases and of infections affecting the immune system
- Apply the principles and knowledge relating to immunology and microbiology to care of those with viral infections
- Begin to form basic investigation and management plans for patients with infectious viral diseases

**F. Lower Respiratory Tract Infections (CTB)**

- Recognise the symptoms and signs and explain the relevant underlying scientific process of infectious disease including multisystem infectious diseases
- Begin to form basic investigation and management plans for patients with infectious diseases by applying the principles and knowledge relating to immunology and microbiology

**G. HIV – Positive voices**

- To understand the impact of different long term health conditions on the lives of patients, their carers and their families
- To listen to different patient perspectives of illness
- To understand the impact of your communication on patients
- Recognise the complex medical needs, goals and priorities of patients and the factors that can affect health and wellbeing in those with complex multisystem diseases

**H. Public Health Infectious Diseases (VLE)**

- Summarise some of ethical issues in communicable disease control that arise from the tension between respect for individual autonomy and protection of others, specifically those issues that arise in relation to immunisation in different sub-populations.
- Describe doctors' legal and professional obligations with respect to notification of communicable diseases and explain how these may give rise to ethical challenges.
- Demonstrate an ability to apply ethical reasoning to these issues and legal obligations in disease control using, for instance, the principles of respect for autonomy, beneficence, nonmaleficence and justice (as equal treatment), and utilitarianism.

**I. Tuberculosis**

- Recognise the symptoms and signs and explain the relevant underlying scientific process of tuberculosis
- Begin to form basic investigation and management plans for patients with tuberculosis by applying the principles and knowledge relating to immunology and microbiology

**J. Update on antibiotics (PPT)**

- Describe mechanisms of action and common side effects of aminoglycoside, glycopeptide, nitrofuran and nitroimidazole antibiotics

**CAI sessions – see CAI Moodle pages for separate L.O.s**

Core procedures groupwork
Asynch: Clinical anatomy of airway management
Asynch: Lumbar puncture, Epidural, Spinal and Caudal anaesthesia

## AB3 Week 2: Autoimmune Conditions

- Recognise and describe the symptoms and signs and explain the relevant underlying scientific process of autoimmune disease
- Begin to form basic investigation and management plans for patients, applying the principles and knowledge relating to cell biology and immunology to care of those with allergies or autoimmune disease
- Begin to demonstrate the ability to work collaboratively with other health and care professionals and organisations when working with patients with complex multisystem disease

**Sessional LOs**

**A. Allergy: a clinical approach**

- Begin to form basic investigation and management plans for patients, applying the principles and knowledge relating to cell biology and immunology to care of those with allergies or autoimmune disease
- Differentiate between different types of immunological responses including allergies

**B. Autoimmunity in rheumatology**

- Recognise and describe the symptoms and signs and explain the relevant underlying scientific process of autoimmune disease
- Begin to form basic investigation and management plans for patients, applying the principles and knowledge relating to cell biology and immunology to care of those with allergies or autoimmune disease
- Begin to demonstrate the ability to work collaboratively with other health and care professionals and organisations when working with patients with complex multisystem disease
- Recognise the complex medical needs, goals and priorities of patients and the factors that can affect health and wellbeing in those with complex multisystem diseases

**C. Challenging inappropriate encounters (Comms skills)**

- Identify different approaches that could be used when faced with inappropriate and offensive situations.
- Consider the pros and cons of using these different approaches when faced with inappropriate and offensive situations in a clinical situation.
- Reflect on which approach/es may work best for you when faced with a challenging situation.
- Gain more confidence to take action when faced with an inappropriate or offensive situation in clinical situations.
- Identify mechanisms for raising concerns and how to access support.

**D. Immunodeficiency and Immunodepression**

- Define the terms immunodeficiency (primary and secondary) & immunosuppression
- Describe the mechanisms of immunodeficiency & immunosuppression
- Describe the pathophysiology of immunodeficiency & immunosuppression in terms of malfunction of normal immunity
- Outline the disease profile of common or important causes of immunodeficiency & immunosuppression

**E. Public Health ethics – screening**

- Outline and apply the ethical principles underlying the appropriate selection and implementation of screening programmes

- Demonstrate awareness of the range of perspectives that might inform patients', doctors' and the public's responses to screening programmes
- Explain how and why consent processes for public health interventions such as screening may diverge from GMC requirements for consent
- Summarise the ethical issues that arise when screening results in overdiagnosis and overtreatment

**F. Resource allocation (VLE)**

- Describe the ethical values that inform decisions about allocation of resources in healthcare.
- Use ethical reasoning to identify and justify morally relevant reasons for treating an individual or group of patients.
- Describe the role of quality-adjusted life years (QALYs) in the allocation of healthcare resources, and use ethical reasoning to evaluate the strengths and weaknesses of this approach to resource allocation

**G. Storytelling for Reflection**

- Understand how group storytelling contributes to safe, reflective practice.
- Have an awareness of the social and emotional aspects of your studies and clinical placements.

**H. Treatment decisions**

- Be able to use tools to determine the risk to benefit ratio for some treatments
- Be able to use risk benefit ratios in decision making with patients
- Be able to work out risk benefit ratios

**Investigation of Anaemia** and **Haemolytic Anaemia** lectures cover L.O.s from **CCE L.O.**

**Pallor of the skin/conjunctiva (Specialities)**

**CAI sessions – see CAI Moodle pages for separate L.O.s**

Applied medical Imaging case studies groupwork

# Core Clinical Education (CCE)

## Introduction

The 30 weeks of Core Clinical Education has an overall aim of transitioning students from mainly classroom-based activities (with some clinical experience) to clinical students who can thrive in an active clinical environment and access clinical learning effectively. We appreciate that dealing with the breadth of possible clinical learning experiences can seem daunting. To deal with this, please remember the overall ethos of CCE (see below). You will do 10 weeks of clinical placement in each of Medicine, Surgery and Specialties, and this will also include some time in GP / Community placements too.

Guidance and outcomes for CCE in general and specific learning outcomes for Medicine, Surgery and Specialties and their individual presentations list follow this. However, this division of presentations between Medicine, Surgery and Specialties is slightly artificial in the clinical environment, as there are overlaps and students will come across various presentations during each block. It is important to utilise any learning opportunity available even if it doesn't 'fit' the learning outcomes of your specific block.

## Overall Ethos

To become competent and confident at

- History taking
- Examination
- Constructing differential diagnoses
- Planning investigations
- Considering initial management
- Communicating with patients and with teams in relation to common and important conditions.

**Guidance**

Your teaching will have focussed on classic presentations in terms of the history and examination findings of common and important conditions. You do need to be aware that not all patients present classically but you are not expected to know all those atypical presentations, just the very common and important ones.

Your list of differential diagnoses should include causes which are common in clinical practice **(usually the first three you will see listed in most textbooks)**, and the investigations you suggest should be routinely available to those in GP and secondary care. You have been provided with a list of relevant investigations.

Your management plans should have a biopsychosocial model and should include a basic knowledge of the modalities available (including psychological and social), and where a drug treatment is available, the class of medication and one or two specific examples. You are not required to remember drug doses except in specific examples. Your CCE online handbook contains a guide to a holistic approach to management. You will also be provided with a Phase II drug list which complements the drug list for Phase I.

Remember the most important thing in medicine is diagnosis; if you begin by thinking about the differential diagnosis, this will guide your questioning to do a focussed history, determine your examination and the choice of investigations.

## Presentation List

The main focus of CCE is clinical learning and the presentation list is taken directly from the updated **MLA presentation list** (October 2025), as this will help you focus on areas of clinical practice and patient care. Assessments will focus on these presentations. You will come across the presentations in a variety of settings – some in case-based learning sessions, some in 'planned' clinical encounters and some you will seek out yourself in the clinical environment. In terms of the 'depth' of learning for each presentation, you should follow the key principles below:

1) *Epidemiology*

How common is this presentation? How important?

2) *Relevant basic science/knowledge*

What basic science do I need to revise in order to understand this presentation fully?
(For example, in a case of chronic cough / COPD, it would be helpful to revise lung anatomy, the pathological effects of smoking on the bronchial tree and lung tissue; type 1 vs type 2 respiratory failure, arterial blood gas results, etc.)

3) *History and Examination*

What are the classical findings for this presentation? How do patients usually present? Are there any common and important ways that the presentation can be misleading?

4) *Differential diagnosis*

What are the *likely / common* causes? This is usually the first 3 on a list you would find in any of the standard texts (e.g. Macleod's Clinical Diagnosis, Macleod's Clinical Examination or Kumar and Clark Clinical Medicine). What are the *important causes* you need to think about in this patient? (For example, something that may be life-threatening)

5) *Investigations*

What are the first line investigations for this presentation? Which are most useful? Which will help you decide between your differential diagnoses?

6) *Management*

What are the key modalities of management? (Advice, self-care, drugs, surgical, etc.)
What are the most important examples for the diagnosis you have made? Refer to the drug list but remember that management is about a lot more than drugs. **Most importantly for the medical management, what are the first line treatments?**

7) *Prognosis*

What is the likely outcome of this case? What factors could alter this prognosis?

# CCE Overarching Learning Outcomes

**By the end of CCE students should be able to take a competent history, perform relevant examination of a patient, know key differential diagnoses for the common patient presentations, provide the most important investigation(s) and suggest initial management.**

1. Take and record a patient's medical history, including family and social history, talking to relatives or other carers where appropriate.
   a. Demonstrate the skills of a patient-centred interview in an active clinical environment.
   b. Explain the immediate and long-term health-related consequences of a 'poor' consultation for the patient and clinician e.g., failure to adhere to advice, delay in seeking help in future, and negative anticipatory effects on subsequent consultation.

2. Present a comprehensive summary of a patient's clinical problem in real clinical scenarios having obtained a full clinical history and performed relevant detailed clinical examination including the likely clinical diagnoses and important differential diagnoses.

3. Observe and reflect on the process of clinical decisions made by teams, particularly where the initial diagnosis is unclear, incorrect or the diagnosis changes.

4. Outline the framework of obtaining consent, exploring ideas, concerns and expectations whilst also showing due regard for respecting the autonomy of a patient. There needs to be an appreciation that this applies to all clinical encounters apart from a few selected emergency situations.

5. Outline the microbiological principles in relation to surgical scrubbing
   a. Outline the etiquette of theatre behaviour in relation to safe surgical practice and specific infection control.
   b. Demonstrate surgical scrubbing and donning of personal protective equipment (including hand antisepsis, surgical gowning, gloving and masking).
   c. Apply the principles of the epidemiology of infectious diseases in a hospital setting. Demonstrate adherence to hospital infection control measures.

# Learning Outcomes: History and Examination

Achieving history taking and examination learning outcomes during each block can mostly be achieved by practicing history taking and examination on patients. The importance of this cannot be overestimated.

**At the end of each block students should be able to:**

1. Demonstrate effective communication in real and simulated scenarios involving patients, carers, and other professionals
    a. Identify and reflect on the communication style of peers.

2. Carry out a competent history and examination of a real or simulated patient including the accurate observation and recording of signs and symptoms.
    a. Demonstrate the skills of seeking questions and checking patient understanding in an active clinical environment.
        i. Analyse how poor consultation/communication results from incongruent doctor-patient beliefs, expectations, and experiences AND in a failure to recognise and respond appropriately to the incongruence.
        ii. Demonstrate accepted methods of allowing patients to ask questions and discuss their views, concerns, and preferences.
    b. When asked to by a supervising clinician, accurately prepare and update clinical records from clinical cases seen in clinical practice. Not all students will get the chance to do this in CCE, but students will have the opportunity as they progress through the course.
        i. Describe ways in which a patient's individuality can be maintained in written communications.
        ii. Apply the principles of legislation, guidance and protocols surrounding the security and confidentiality of patient identifiable information and the access of such information by patients, their representatives, or clinicians in common scenarios.
    c. Take an occupational history and proceed to relevant clinical examination and necessary investigations as relevant to the occupational condition.
    d. Take a nutritional history and relate under/over nutrition to relevant clinical cases.
    e. Demonstrate gaining a relevant and focused drug history from real and simulated patients.
        i. Identify common and important barriers in gaining a full medication history particularly in the young, the elderly and those on complex treatment regimes.
        ii. Understand the key issues in identifying a standard drug history including drug names, dose, route, and concordance.
        iii. Make an accurate assessment of adherence to medication as part of a medical history.
    f. Recognise and ensure accurate documentation of patient's level of functioning in activities of daily living and requirements for social support by informal or professional carers.
    g. Assess the impact of alcohol consumption using an appropriate tool e.g., CAGE.

3. Demonstrate a structured approach to examining the well adult including observation, palpation, and auscultation.
    a. Demonstrate ability to communicate appropriately with patient while performing a physical examination; to explain what is going to be done; reassure during inspection and also keep continual observation of patient's non-verbal and verbal cues during examination.
    b. Relate key examination findings in common clinical cases to relevant clinical decisions.

4. Accurately present the results of history taking and examination in a succinct but comprehensive way including, when necessary, the ability to prioritise the most clinically relevant data
    a. Present a series of clinical cases with varying degrees of complexity conveying the key relevant clinical information.
    b. Present a series of clinical cases that demonstrate a systematic, integrated, and efficient process for making an initial assessment of a patient's presentation.

5. Summarise clinical observations for real and simulated patient cases.
    a. Use chart clinical data, including patient symptoms, into locally used approaches such as NEWS, ABCDE, Glasgow Coma Scale to gauge the severity of a clinical presentation
    b. List and describe key emergencies Foundation doctors need to respond to. Please note that management of these emergencies will be covered in Phase 3.

6. Provide a full list of additional differential diagnoses and co-morbidities for relevant core clinical cases and analyse the relevant likelihood and importance of each.

7. Apply accepted practice in the recording of patients' notes derived from histories taken in the clinical environment of patients presenting with core presentations.
    a. Understand basic abbreviations and their meanings as commonly used when recording medical histories. e.g., TIA for transient ischaemic attack
    b. Having taken a comprehensive clinical history and performed a full clinical examination, list possible clinical systems implicated and state possible diagnoses for the presenting complaint

**Top Tips**

- Be proactive, ask the resident doctors and nursing staff if there are suitable patients on the ward for you to talk to.

- Try to see a variety of patients and use your whole faculty team for learning opportunities, not just your consultant. However, all patients are different, 10 patients with the same diagnosis will give different histories so don't exclude patients because they have a condition you have seen before.

- Observe and be observed by your clinical partner and give each other feedback; ask for specific feedback if you have a particular area you are working on. Ask patients for feedback. Talk to relatives

- Follow up patients during their hospital stay; go with them for investigations, if possible.

- Sign up for bedside teaching sessions. In hospital or GP sessions it doesn't matter if you get it wrong, you will get good constructive feedback on how to improve.

- Ask resident doctors for extra Mini-CEX, OSLERs and CBDs.

**Time spent on the wards at this stage is far more productive than in the library**.

# Learning outcomes: Investigations / Differential Diagnoses

**At the end of each block students should be able to:**

1. Outline the process of formulating a plan of investigation / care and how to discuss this with a patient (and carers / family if appropriate). Demonstrate how to check patients' understanding and talk to family about a plan if the patient consents.

2. Interpret the results of common investigations and clinical images in relation to disease severity and track patient progress in real clinical scenarios.
    a. Interpret various sets of clinical results and clinical images from the subset of the clinical skills listed in Tomorrows Doctors and presented in the investigations list for CCE. If you're not sure: ask!
    b. Interpret the results of common investigations and clinical images in relation to refining a clinical diagnosis including understanding normality and potential life-threatening scenarios.

3. Demonstrate reaching relevant and useful conclusions about a patient's general health and progress during common illnesses or treatment using clinical data (NEWS charts, blood results, etc.) in real or simulated patients.

4. Describe the selection of investigations used for the differential diagnosis of common and / or important conditions as specified in the presentations list.
    a. List the categories of investigations used for common and/or important conditions and explain the fundamental principles underlying the categories, e.g., LFTs for abdominal pain.
    b. List the individual tests, which belong to the categories of investigations used for common and/or important conditions, e.g., Trop T for ACS. Describe the risks and contraindications to the individual tests.

5. Describe patterns of test abnormality that are typical of common and important conditions.
    a. Describe the changes in values for a given test that constitute abnormality rather than normal variability.
    b. Describe patterns of test abnormality which though may not be frequent may lead to errors in assessing common and important conditions e. D-dimer when not indicated, which may lead to unnecessary CTPA.
    c. Demonstrate an ability to question when the result of a laboratory test may be erroneous considering a knowledge of an individual patient's clinical state. Don't be afraid to ask questions of your seniors.

6. Describe and explain investigations in terms that health service users may understand, in supervised clinical environments, such that the description might be used as the basis of informed consent, e.g., an explanation of an ABG procedure.

## Top Tips

- Keep taking histories and examining as many patients as you can.
- At the end discuss with your clinical partner what the differential diagnoses might be – even if you know the diagnosis you can still think of other possibilities. How would the history or examination differ with the other diagnoses?
- Discuss what investigations you would do if you were the doctor seeing each patient for the first time.
- Look at various test results – from patients' records, from your GP placement and try to interpret them.
- Follow patients for radiological investigations, endoscopies, etc. Could you describe to a patient what is going to happen during the test? Talk to patients about their experience of the test.
- Use the investigations list as a guide for learning.

# Learning Outcomes: Initial management plan

To effectively develop an **initial** management plan with patients depends on having already:

- Taken a good history and examination, including ICE and biopsychosocial history
- Formed appropriate differential diagnosis
- Considered appropriate investigations
- Formed a good relationship with the patient

**At the end of each block students should be able to:**

1. Formulate and present a management plan including treatment, symptomatic management and advice for a single diagnosis in a clinical case and understand how this may be altered in cases where there are co-morbidities.

2. Select appropriate forms of initial management for common and important conditions in the presentation list.

3. Explain management in terms understandable by users of health services, including the modes of action and risks of various forms of treatment for common diseases (including surgical, medical, radiotherapeutic, supportive, palliative) as well as discussing preventive approaches to common diseases with them.

4. State how to assess pain using the WHO ladder
    a. State the therapeutic steps available for effective analgesia, nausea and other common symptoms often managed by FY1 and FY2 doctors.
    b. Assess past as well as current symptom control (particularly pain) and medication use to determine effectiveness of different approaches.

5. Explain appropriate forms of lifestyle management for common and important diseases in terms understandable to health service users including when there is resistance to change.
    a. Select appropriate forms of lifestyle management for common and important diseases.
    b. Identify skills that enhance behaviour change. Use reflective statements in clinical and simulated environments. Demonstrate the ability to conduct a “Brief Intervention” (e.g. FRAMES) to encourage behaviour change.

## Top Tips

- Your management plans should take a holistic approach to the patient and their needs. Using a **bio-psycho-social approach** can be helpful in providing a structure.

- Another approach is to use a **problem list.** Consider different modalities of treatment: surgical, medical, radiotherapeutic, supportive, palliative and preventive.

- You need to know the drugs on the Year 2 drugs list. You will usually be asked the **drug class**, of which you should be able to name an example, describe the mechanism of action, and a couple of common side effects. You do **NOT** need to know doses at this stage.

- Management is not just about drugs. Think about other health professionals, social care, family, and caregivers who might be involved. The multi-disciplinary team is very important in managing patient care.

- Practice your brief interventions on patients you see. Communicating the plan with patients is key to concordance. Practice explaining to patients what their diagnosis is, what their investigations are, and what treatment may involve.

- You should know red flags which require urgent referral for common cancers.

- Detailed knowledge of guidelines is not required. NICE clinical knowledge summaries provide a REALLY useful overview.

# Medicine Block Presentations and Learning Outcomes

Below is a list of common and important presentations you should cover during medicine block in CCE. The presentations are not an exhaustive list; it is to give you an idea of the common conditions you are expected to come across in the clinical environment.

| | |
|---|---|
| **Cardiovascular**<br>1. Breathlessness<br>2. Chest pain<br>3. Heart murmurs<br>4. High blood pressure<br>5. Palpitations<br>6. Peripheral oedema and ankle swelling<br>7. Swollen limb(s)<br><br>**Endocrine / Metabolic**<br>8. Fatigue<br>9. Weight loss<br><br>**General medicine**<br>10. Allergy/allergic reaction<br>11. Deteriorating patient<br>12. Fever | **Neurological**<br>13. Blackout and faints<br>14. Dizziness<br>15. Fits / seizures<br>16. Headache<br>17. Limb weakness<br><br>**Renal and urinary**<br>18. Acute Kidney Injury<br>19. Chronic Kidney Disease<br>20. Electrolyte abnormalities<br><br>**Respiratory**<br>21. Cough<br>22. Haemoptysis<br>23. Pain on inspiration<br>24. Sore throat |

The key learning outcomes are:

- To take an adequate history and understand relevant differentials
- Carry out necessary examinations and investigations
- To outline and describe the initial management plans

**NB: To help focus your learning, we have included some examples of common / important conditions related to each presentation underneath each of them. This is not an exhaustive list and does not limit the assessment of a patient with that presentation. You will also notice the overlap across various presentations.**

# Cardiovascular

## 1. Breathlessness

By the end of the block students should be able to:

History

- Take a history of a patient with breathlessness including onset / duration of symptoms, characterisation of symptoms, smoking history, past medical history, chest pain, orthopnoea, PND, and risk factors.

Examination

- Carry out a general examination (reduced oxygen saturations, cyanosis), and a respiratory/cardiovascular examination eliciting abnormal findings which may be present, including wheeze, crepitations, crackles, raised JVP and heart murmurs.

Differential diagnoses

- Identify important differential diagnoses for acute cardiac breathlessness (including cardiogenic pulmonary oedema, acute coronary syndrome, cardiac tamponade, arrhythmia, acute valvular heart disease) and chronic cardiac breathlessness (chronic heart failure, valvular coronary artery disease, pulmonary hypertension, constrictive pericarditis, cardiac tamponade and pericardial effusion).
- Describe important differential diagnoses for non-cardiac causes of acute breathlessness (including epiglottitis, COVID-19, acute bronchitis, acute asthmatic attack, pneumonia, ARDS, pneumothorax, PE, bronchiolitis) and chronic breathlessness (asthma, COPD, pleural effusion, bronchiectasis, lung cancer, interstitial lung disease and cystic fibrosis). Understand the underlying pathophysiology of breathlessness.

Investigations

- Describe important bedside, laboratory and radiological investigations for cardiac and non-cardiac breathlessness including ABG, FBC, CXR, ECG, echocardiogram, PEFR, lung function tests, and their interpretation.

Management

- Explain the principles of management (drug and non-drug) for common respiratory conditions (asthma, COPD, pneumonia, pulmonary embolism). Explain to a patient how to use a peak flow meter and keep a diary.
- Describe initial management for heart failure, cardiac arrythmia, fluid overload, and other common causes.

**CONDTIONS**

- HEART FAILURE
- ACUTE CORONARY SYNDROMES
- TACHYARRHYTHMIAS
- ASTHMA
- CHRONIC OBSTRUCTIVE PULMONARY DISEASE
- ASTHMA-CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) OVERLAP
- PNEUMONIA
- PNEUMOTHORAX

## 2. Chest pain

By the end of the block students should be able to:

History

- Take a history of a patient with chest pain, onset of symptoms, radiation, duration, progression, characterisation of the pain, red flags, and risk factors for cardiovascular disease as well as diet, lifestyle, and family history.

Examination

- Perform a cardiovascular examination and elicit findings which may be seen in patients with chest pain such as heart murmurs, pulmonary oedema, and other associated signs.

Differential diagnoses

- Describe key differential diagnoses for acute chest pain including angina pectoris, types of acute coronary syndrome, acute pericarditis, haemoglobinopathy (sickle cell disease), myocarditis, and acute pericarditis.
- Describe important differential diagnoses for chronic chest pain including angina pectoris, gastro-oesophageal reflux disease, musculoskeletal pain and also anxiety.

Investigations

- Describe relevant bedside, laboratory and radiological investigations including ECG, echocardiogram, (serial) serum troponin, coronary angiogram, CXR, upper GI endoscopy, along with their interpretation.

Management

- Explain the principles of management (drug and non-drug treatment) including analgesia, cardiac medications, lifestyle advice and referral.

**CONDITIONS**

- ACUTE CORONARY SYNDROMES
- ISCHAEMIC HEART DISEASE (INCLUDING STABLE ANGINA)
- GASTRO-OESPHAGEAL REFLUX DISEASE (INCLUDING BARRETT'S OESOPHAGUS)
- SICKLE CELL DISEASE
- MYOCARDITIS

## 3. Heart murmurs

By the end of the block students should be able to:

History

- Take a history including cardiac symptoms, functional impairment, past medical history, and family history.

Examination

- Carry out a cardiovascular examination including nature of the murmur including timing, duration, nature, intensity, location, radiation, and severity. In addition, you should be able to describe the anatomy and physiology of heart murmurs.

Differential diagnoses

- Describe important types of murmurs including 1) Ejection systolic murmurs (possible causes- increased flow, innocent murmurs from fever, pregnancy, atrial-septal defect, severe anaemia, aortic/pulmonary stenosis. 2) Pansystolic murmurs (possible causes- mitral / tricuspid regurgitation, VSD). 3) Diastolic murmurs (possible causes- aortic regurgitation, pulmonary regurgitation and mitral stenosis).
- Describe common and important underlying causes of heart murmurs including aortic valve disease, mitral valve disease, right heart valve disease, rheumatic heart disease, infective endocarditis, myocardial infarction with rupture of papillary muscles, valve prolapse, ASD/VSD, calcific degeneration, congenital bicuspid valve, congenital aortic stenosis, ankylosing spondylitis and Marfan's syndrome.

Investigations

- Describe bedside, laboratory and radiological investigations including echocardiogram, ECG and FBC, plus specialist investigations, as needed.

Management

- Describe initial management including monitoring of murmurs, treatment of underlying causes, and referral to a specialist when appropriate.

**CONDITIONS**

- AORTIC VALVE DISEASE
- MITRAL VALVE DISEASE
- RIGHT HEART VALVE DISEASE

## 4. High blood pressure

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, progression, associated risk factors, lifestyle factors, demographics and red flags.

Examination

- Carry out examination including general, cardiovascular and neurological exam where appropriate (as hypertension can affect multiple organ systems)

Differential diagnoses

- Identify important differential diagnoses including essential hypertension, secondary causes such as renal disease, diabetic nephropathy, substance misuse, hyperthyroidism, Cushing's syndrome, hyperparathyroidism and obstructive sleep apnoea, and understand the demographics and risk factors associated with each cause.

Investigations

- Describe important bedside, laboratory and radiological investigations including ambulatory BP monitoring, U & Es, and ECG.

Management

- Understand initial management including non-drug measures, NICE hypertension guidelines and effect of hypertension on other organ systems.

**CONDITIONS**

- HYPERTENSION (ESSENTIAL OR SECONDARY)
- OBESITY
- CHRONIC KIDNEY DISEASE
- DIABETIC NEPHROPATHY
- HYPERTHYROIDISM/THYROTOXICOSIS
- CUSHING SYNDROME

## 5. Palpitations

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression (including chest pain), risk factors, medications and social history.

Examination

- Carry out a cardiovascular examination including checking for murmurs and JVP, and also understand the mechanisms which can cause palpitations.

Differential diagnoses

- Describe important differentials including 1) Sinus tachycardia (causes including anxiety, anaemia, thyrotoxicosis, fever, Beta$_2$ agonists, anticholinergics, amphetamines) 2) Premature ventricular complexes. 3) Atrial arrhythmias such as SVT (Wolff-Parkinson-White syndrome), atrial tachycardia/flutter/fibrillation (causes including ischaemic heart disease, valvular heart disease, hypertension, alcohol excess); 4) Ventricular tachycardias (causes including previous MI, cardiomyopathy).

Investigations

- Describe bedside, laboratory and radiological investigations including ECG, FBC, TFTs, echocardiogram and U & Es; understand their interpretation

Management

- Explain initial management for palpitations including for SVT, AF, and VT.

**CONDITIONS**

- ADVERSE DRUG EFFECTS

- TACHYARRHYTHMIAS
- ANAEMIA
- GENERALISED ANXIETY DISORDER
- HYPERTHRYOIDISM/THYROTOXICOSIS
- RIGHT HEART VALVE DISEASE

## 6. Peripheral oedema and ankle swelling

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression of the swelling including past medical history, cardiac history, medications, and red flags.

Examination

- Perform a general examination checking for pitting or non-pitting oedema, lymphadenopathy, assessment of fluid status and cardiovascular examination.

Differential diagnoses

- Describe important differential causes including cardiac failure, renal failure, liver disease, pelvic mass, drugs, pretibial myxoedema, DVT, chronic venous insufficiency and lymphoedema. Also consider common causes including long periods of standing, pregnancy and being overweight.

Investigations

- Describe important bedside, laboratory and radiological investigations including ECG, echocardiogram, FBC, U+Es, LFTs, TFTs, D-dimer, USS abdomen / pelvis, and pregnancy test.

Management

- Explain the principles of management of peripheral oedema including initial treatment of underlying conditions, lifestyle advice, elevation of legs, medications and referral for red flags.

**CONDITIONS**

- HEART FAILURE
- CHRONIC KIDNEY DISEASE
- LIVER FAILURE
- ADVERSE DRUG EFFECTS
- DEEP VEIN THROMBOSIS

## 7. Swollen limb(s)

By the end of the block students should be able to:

History

- Take a history including risk factors for DVT and any history of trauma or infective symptoms. Consider heart failure/venous stasis if bilateral.

Examination

- Examine for key features including calf swelling, erythema, tenderness, deformity, neurological pathology. Consider a Wells score, PERC score (especially if chest pain) and also a neurovascular assessment of the leg

Differential diagnoses

- Describe important differential diagnoses including DVT, trauma, venous insufficiency, cellulitis, thrombophlebitis, compartment syndrome, aneurysms, ischaemic limb and occlusions, and ruptured Baker's cyst.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations including, D-Dimer, FBC, doppler USS and X-ray of the leg.

Management

- Explain initial management including pain relief, LMWH for DVT and antibiotics for cellulitis.

**CONDITIONS**

- DEEP VEIN THROMBOSIS
- CELLULITIS
- COMPLICATIONS OF FRACTURES (INCLUDING COMPARTMENT SYNDROME)
- ANEURYSMS, ISCHAEMIC LIMB AND OCCLUSIONS

## Endocrine / Metabolic

### 8. Fatigue

By the end of the block students should be able to:

History

- Take a history including current symptoms, lifestyle, drug history, social and past medical history as well as red flags, plus ensure an understanding that fatigue may indicate issues with mood or social circumstances.

Examination

- Demonstrate key features in the examination of a patient with fatigue including general examination, thyroid signs and assessment of mood.

Differential diagnoses

- Identify important differential diagnoses for long-term fatigue including 1) Non-organic (psychological stress / overwork, depression, fibromyalgia, ME, chronic fatigue syndrome). 2) Medication-induced fatigue (beta-blockers, benzodiazepines, corticosteroids) 3) Haematological causes (anaemia, lymphoma, myeloproliferative disorders, polycythaemia); 4) Endocrine causes (DM, hypothyroidism, adrenal insufficiency, vitamin deficiency); 5) Infection (TB, HIV, infectious mononucleosis); 6) Sleep apnoea, CCF, 7) Malignancy-leukaemia 8) Short-term causes including transient infections and difficult life circumstances 9) Autoimmune - Myasthenia gravis.

Investigations

- Describe important bedside, laboratory and radiological investigations including TFTs, LFTs. FBC, Iron, B12 and Folate levels, plus specialist investigations as indicated.

Management

- Explain drug and non-drug management including lifestyle factors

**CONDITIONS**

- ANAEMIA
- DEPRESSION
- ADVERSE DRUG EFFECTS
- HYPOTHYROIDISM
- LYMPHOMA

### 9. Weight loss

By the end of the block students should be able to:

History

- Take a history including medication, social, dietary history, past medical history and exploration of risks of malnutrition
- Identify key features in a history including degree of weight loss, if weight loss is intentional or unintentional, associated symptoms and red flags for weight loss.

Examination

- Carry out general examination for signs of anaemia, vitamin deficiency and also consider lymph node examination, abdominal examination (for abdominal tenderness, masses, PR bleeding), as well as looking for signs of thyroid abnormalities.

Differential diagnoses

- Consider nutritional deficiency, eating disorders, low mood, IBD, thyrotoxicosis, coeliac disease, diabetes mellitis type 1 and cancer.

Investigations

- Describe important bedside, laboratory and radiological investigations including blood pressure monitoring, FBC, LFTs, TFTs, vitamin levels, calprotectin, blood lipids and coeliac screen.

Management

- Explain approach to management (depending on cause) and include lifestyle advice, nutritional assessment, medication review and referral as appropriate.

**CONDITIONS**

- HYPERTHYROIDISM/THYROTOXICOSIS
- ADVERSE DRUG EFFECTS
- MALABSORPTION
- MALNUTRITION
- COELIAC DISEASE
- EATING DISORDERS
- PANCREATIC CANCER
- COLORECTAL CANCER

# General Medicine

## 10. Allergy/allergic reaction

By the end of the block students should be able to:

History

- Take a history of symptoms - onset, duration, triggers, rash, cough, wheeze, facial swelling and GI symptoms, as well as past medical history and family history of atopy.

Examination

- Carry out a general examination for rashes, swelling, facial oedema and also do a respiratory examination for signs of respiratory distress including stridor and wheeze.

Differential diagnoses

- Identify important differential causes for allergy including anaphylaxis, allergic rhinitis, eczema, adverse drug reactions, angioedema, bites / stings, coeliac disease, contact dermatitis and allergic disorders.
- Evaluate other possible differentials for anaphylaxis including idiopathic urticaria, flushing, acute respiratory distress, asthma and vocal cord dysfunction.

Investigations

- Describe important investigations including Tryptase blood tests for anaphylaxis (and the timing that this should be done), skin prick testing, tests for hereditary angioedema, and tests also to diagnose GI conditions such as coeliac disease.

Management

- A-E assessment of the unwell patient.
- Explain initial emergency management for anaphylaxis including adrenaline (or epi-pen), IV fluids, steroids, and antihistamines, Explain initial management for allergies including creams, antihistamines, oral steroids and avoiding triggers. Consideration of antibiotics for bites or stings.

**CONDITIONS**

- ANAPHYLAXIS
- ALLERGIC DISORDER (INCLUDING FOOD ALLERGY)
- URTICARIA
- ASTHMA
- ATOPIC DERMATITIS/ECZEMA
- ADVERSE DRUG REACTION

## 11. Deteriorating patient

By the end of the block students should be able to:

History

- Take a history including onset of symptoms, duration, progression, medication and past medical history. Recognise neutropenic sepsis as a medical emergency.

Examination

- Consider A – E assessment. Recognise criteria for sepsis. Examine a deteriorating or septic patient for key features including general examination for signs of infection, shock, and examination of key organ systems (e.g. respiratory, neurological, abdominal and urinary). Elicit key clinical signs which may help develop appropriate differential diagnoses for acidosis and alkalosis

Differential diagnoses

- Identify important differential diagnoses including sepsis of chest, urinary or abdominal origin and sepsis of unknown origin. Describe the causes of respiratory alkalosis / acidosis and causes of metabolic alkalosis / acidosis.

Investigations

- Describe important bedside, laboratory and radiological investigations including FBC, ABG/VBG, renal and liver function tests, C-reactive protein, lactate, blood cultures, CXR, USS or CT scan.

Management

- Describe the principles of management including rapid antibiotic treatment and IV fluids. Know the Sepsis 6 (Oxygen, IV access and bloods + blood cultures, lactate, IV Abx, IVF, urine monitoring). Escalate as appropriate and recognise complications such as septic shock.

**CONDITIONS**

- SEPSIS (INCLUDING NEUTROPENIC SEPSIS)
- ACID-BASE ABNORMALITY
- CARDIAC ARREST
- RESPIRATORY ARREST
- RESPIRATORY FAILURE
- HYPOGLYCAEMIA
- ANAPHYLAXIS
- MULTI-ORGAN DYSFUNCTION SYNDROME

## 12. Fever

By the end of the block students should be able to:

History

- Take a history including nature of symptoms, associated symptoms such as rigors and specific systemic complaints (e.g. cough, dysuria, abdominal pain, diarrhoea and vomiting)

Examination

- Examine a patient with fever including general examination (temp, pulse, BP, $O_2$ saturation) and specific examination for abnormal findings that might be present such as reduced air

entry to the chest, abdominal tenderness, exudates on tonsils. Examine for source of infection.

Differential diagnoses

- Identify important differential diagnoses including acute phase infection (HIV, Tuberculosis, tonsillitis, Influenza, Hospital Acquired Infections, malaria) but also polymyalgia rheumatica, SLE, rheumatoid arthritis, drug reactions, and malignancies (haematological, solid tumours – renal, liver colon). Understand the pathophysiology of thermoregulation and pyrexia of unknown origin.

Investigations

- Describe bedside, laboratory and radiological investigations including FBC, CRP, LFTs, U+Es, urinalysis/culture, blood cultures and chest x ray.

Management

- Explain the principles of management including antibiotic therapies, antipyretics and managing the unwell patient symptomatically.

**CONDITIONS**

- LOWER RESPIRATORY TRACT INFECTION
- URINARY TRACT INFECTION
- SURGICAL SITE INFECTION
- ADVERSE DRUG EFFECTS
- SYSTEMIC LUPUS ERYTHEMATOSIS
- HUMAN IMMUNODEFICIENCY VIRUS (HIV)
- MALARIA

# Neurology

## 13. Blackouts and faints

By the end of the block students should be able to:

History

- Take a history of preceding symptoms which may include neurological symptoms and relevant cardiovascular symptoms as well as any symptoms during recovery. Consider triggers, previous episodes, cardiovascular history, medications, and red flags (such as chest pain, palpitations, prolonged confusion and focal neurological symptoms)

Examination

- Carry out a general and neurological examination including cranial nerves examination, and cardiovascular exam.

Differential diagnoses

- Identify important differential causes for blackouts including vasovagal attack, orthostatic hypotension, adrenal insufficiency, brady/tachyarrhythmia, adverse drug effects, anaemia, aortic valve disease, autonomic neuropathy, hypovolaemia/volume depletion, hypoglycaemia and electrolyte disturbance.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations including blood glucose, lying and standing BP, ECG, FBC, U & Es, CT scan, MRI brain and their interpretation.

Management

- Explain initial management including medication, lifestyle advice and safety netting

**CONDITIONS**

- SYNCOPE (INCLUDING VASGOVAGAL, CARDIAC)
- TACHYARRHYTHMIAS/BRADYARRHYTHMIAS

- ADRENAL INSUFFICIENCY
- ANAEMIA
- AORTIC VALVE DISEASE
- AUTONOMIC NEUROPATHY
- HYPOVOLAEMIA/VOLUME DEPLETION
- ORTHOSTATIC/POSTURAL HYPOTENSION

## 14. Dizziness

By the end of the block students should be able to:

History

- Take a history including neurological symptoms, relevant cardiovascular symptoms, medications, and red flags (such as loss of consciousness, weakness and speech disturbance)

Examination

- Carry out a general and neurological examination including cranial nerves examination. Cardiovascular exam where appropriate.

Differential diagnoses

- Identify important differential causes for dizziness including vasovagal attack, orthostatic hypotension (Addison's disease, eating disorder), brady/tachyarrhythmia, posterior stroke, hypoglycaemia, partial seizure, migraine variants, hyperventilation and anxiety.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations including blood glucose, ECG, CT scan, MRI brain and their interpretation.

Management

- Explain initial management including medication, lifestyle advice and safety netting

**CONDITIONS**

- SYNCOPE (INCLUDING VASGOVAGAL, CARDIAC)
- TACHYARRHYTHMIAS
- BRADYARRHYTHMIAS
- STROKE
- BENIGN PAROXYSMAL POSITIONAL VERTIGO (BPPV)
- HYPOVOLAEMIA/VOLUME DEPLETION
- ADRENAL INSUFFICIENCY

## 15. Fits/Seizures

By the end of the block students should be able to:

History

- Take a history including symptoms before and after seizure, witness accounts of the event, memory loss, weakness, head injury, tongue biting and loss of bowel/bladder control.

Examination

- Carry out a general examination including assessment of tongue bite, other injuries during seizure, loss of bowel or bladder control and neurological examination including cranial nerve examination. Also examine for injuries from seizure.

Differential diagnoses

- Identify important causes including epilepsy, trauma/bleed to the brain, hypoglycaemia, electrolyte abnormality, alcohol and drug intoxication or withdrawal, brain abscess, migraine and non-epileptic episodes.

Investigations

- Important bedside, laboratory and radiological investigations including head CT, MRI brain, EEG, U+E, blood glucose and FBC.

Management

- Undertake initial management for seizures including A-E assessment (particularly basic airway management) and consideration of medications (e.g., benzodiazepine) if indicated.

**CONDITIONS**

- EPILEPSY
- SUBDURAL HAEMATOMA
- ENCEPHALITIS
- MENINGITIS
- BRAIN ABSCESS
- SOMATIC SYMPTOM DISORDER

## 16. Headache

By the end of the block students should be able to:

History

- Take a history of a patient with headaches including characterising the pain, definitive features and red flags for acute vs chronic headache.

Examination

- Examine a patient with chronic headache (including neurological examination) and explain the findings.

Differential diagnoses

- Identify important differential diagnoses including migraine, tension headache, cluster headache, subdural haematoma, extradural haemorrhage, trigeminal neuralgia, giant cell arteritis, medication / analgesia headache and sinusitis.

Investigations

- Describe important bedside, laboratory and radiological investigations e.g. CT brain, MRI and their interpretation

Management

- Drug and non-drug management including lifestyle factors.

**CONDITIONS**

- PRIMARY HEADACHE DISORDERS (INCLUDING MIGRAINE, CLUSTER HEADACHE, TENSION HEADACHE)
- TRIGEMINAL NEURALGIA
- RHINOSINUSITIS
- RAISED INTRACRANIAL PRESSURE
- SUBARACHNOID HAEMORRHAGE
- PRIMARY ALDOSTERONISM

## 17. Limb weakness

By the end of the block students should be able to:

History

- Take a history of limb weakness, including neurological symptoms, previous history of TIA and risk factors for stroke.

Examination

- Carry out a general and neurological examination and be able to describe key features.

Differential diagnoses

- Identify important differential diagnoses including stroke, TIA, syncope, peripheral nerve injuries / neuropathies, demyelination (MS) and migraine. Relate history and examination findings to the anatomy of the brain to identify areas of the brain affected

Investigations

- Describe bedside, clinical, laboratory and radiological investigations including CT head, CT angiography, MRI and nerve conduction studies.

Management

- Understand approaches to managing chronic unilateral limb weakness, including medications, physiotherapy, psychological support, and specialist referral.

**CONDITIONS**

- STROKE
- TRANSIENT ISCHAEMIC ATTACKS (TIA)
- MOTOR NEURONE DISEASE
- MULTIPLE SCLEROSIS (MS)
- PERIPHERAL NERVE INJURIES/PALSIES
- RADICULOPATHIES

## Renal and Urinary

### 18. Acute Kidney Injury

By the end of the block students should be able to:

History

- Take a history of acute kidney injury and renal failure including loin pain, oliguria, diet and fluids, excessive exercise, fatigue, medication history, and possible risk factors.

Examination

- Demonstrate key features of renal disease including fluid status, skin changes, oedema (legs / ankles / feet) and signs of associated conditions like diabetes.

Differential diagnoses

- Describe the physiology involved in AKI and classify causes as pre-renal, renal or post renal.
- Identify important differential diagnoses including pre-renal (severe blood loss, burns, severe hypotension, heart failure, shock), renal (glomerulonephritis, infection, drugs – chemotherapy / antibiotics, medication nephropathy) or post-renal (obstruction e.g. bladder cancer, prostate cancer, BPH, urinary tract calculi).

Investigations

- Describe relevant investigations including U+Es, CK, blood glucose, renal USS and renal biopsy.

Management

- Understand principles of management including medications (e.g., diuretics, potassium-lowering drugs, calcium supplements), nutrition, dialysis and referral.

**CONDITIONS**

- HYPOVOLAEMIA/VOLUME DEPLETION
- SEPSIS (INCLUDING NEUTROPENIC SEPSIS)
- NEPHROTIC SYNDROME
- GLOMERULONEPHRITIS
- URINARY TRACT INFECTION
- ADVERSE DRUG EFFECTS
- MULTIPLE MYELOMA

### 19. Chronic Kidney Disease

By the end of the block students should be able to:

History

- Take a history of symptoms of chronic kidney disease including swelling, fatigue, skin changes and features of proteinuria including urinary symptoms.

Examination

- Demonstrate general examination as well as key features of the exam including fluid status assessment, skin changes and blood pressure monitoring.

Differential diagnoses

- Identify important differential diagnoses of CKD and proteinuria including renal (glomerulonephritis, diabetes, amyloidosis, SLE, infection, interstitial nephritis, Cushing's syndrome, multiple myeloma), non-renal (burns, severe hypertension, heart failure) and transient proteinuria (vigorous exercise, febrile illness, cold exposure).

Investigations

- Describe relevant investigations including U+Es, urinalysis, blood glucose, renal USS/Doppler and renal biopsy.

Management

- Understand principles of management including medications (e.g. diuretics, blood pressure lowering drugs, calcium / Vit D supplements), nutrition, dialysis and referral.

**CONDITIONS**

- DIABETIC NEPHROPATHY
- SYSTEMIC LUPUS ERYTHEMATOSUS
- ADVERSE DRUG EFFECTS
- HYPERTENSION (ESSENTIAL OR SECONDARY)
- BENIGN PROSTATIC HYPERPLASIA
- MULTIPLE MYELOMA

## 20. Electrolyte abnormalities

By the end of the block students should be able to:

History

- Take a history including nature of symptoms, any neurological symptoms, fatigue, diet and fluid history and also associated symptoms such as rigors and systemic complaints (for example, dysuria, abdominal pain, diarrhoea and vomiting).

Examination

- Examine a patient with dehydration or fluid overload including looking for signs of fluid imbalance- whether hyper or hypovolaemic (e.g. skin turgor, dry mucous membranes, JVP).

Differential diagnoses

- Identify common causes of fluid imbalance including dehydration and fluid overload.
- Identify important differential diagnoses including hypo and hypernatraemia, hypo and hyperkalaemia, and what may cause these- including excessive diuretic therapy, acute diarrhoea/vomiting, oliguric renal failure, cardiac failure, SIADH, diabetic insipidus, Addison's disease, Cushing's syndrome, cirrhosis, hyperosmolar hyperglycaemic state, drugs (anticonvulsants, antidepressants, psychotropics)
- Identify common presentations of hypo and hypercalcaemia and understand what may cause these (e.g. Hyperparathyroidism, hypercalcaemia of malignancy, hypoparathyroidism).

Investigations

- Describe bedside, laboratory and radiological investigations including U&Es, bone profile, plasma osmolality, urine osmolality, CXR and CT brain, and their interpretation.

Management

- Including IV/oral fluids for dehydration and diuretics for fluid overload, supplements for hyponatraemia and hypokalaemia, and emergency initial management of hyperkalaemia and hypercalcaemia.

**CONDITIONS**

- ADRENAL INSUFFICIENCY
- HYPOVOLAEMIA/VOLUME DEPLETION
- ADVERSE DRUG EFFECTS
- CUSHING'S SYNDROME
- HYPERCALCAEMIA /HYPOCALCAEMIA
- HYPOPITUITARISM
- CARDIAC FAILURE
- CHRONIC KIDNEY DISEASE
- ARGININE VASOPRESSIN DEFICIENCY/RESISTANCE (DIABETES INSIPIDUS)

# Respiratory

## 21. Cough

By the end of the block students should be able to describe:

History

- Take a history of a patient with cough and/or wheeze including aggravating and relieving factors, change in voice, history of atopy or GORD, smoking, social and occupational history as well as red flags.

Examination

- Carry out a respiratory examination of a patient with cough (+/-wheeze) including oxygen saturations, breath sounds, and other chest findings.

Differential diagnoses

- Identify important differential diagnoses including asthma and COPD, TB, allergies, lower respiratory tract infection, acute bronchitis, croup, bronchiolitis, bronchiectasis, asbestos-related lung disease, fibrotic lung disease, sarcoidosis, occupational lung disease and GORD.

Investigations

- Describe bedside, laboratory and radiological investigations including CXR, peak flow and spirometry and their interpretation. Consider more specialist investigations, as required,

Management

- Explain the principles of drug and non-drug management including lifestyle factors for the differential diagnoses above.

**CONDITIONS**

- ASTHMA
- CHRONIC OBSTRUCTIVE PULMONARY DISEASE
- ACUTE BROCHITIS
- PNEUMONIA
- TUBERCULOSIS
- GASTRO-OESOPHAGEAL REFLUX DISEASE (INCLUDING BARRETT'S OESOPHAGUS)
- LOWER RESPIRATORY TRACT INFECTION

## 22. Haemoptysis

By the end of the block students should be able to:

History

- Take a history including onset of symptoms, duration, progression, travel history, associated respiratory symptoms, lifestyle and risk factors / red flags.

Examination

- Carry out general and respiratory examination. Describe key features of the examination including pink tinge frothy sputum of left ventricular failure, deep red flecks in bronchial carcinoma and pulmonary embolism, and the rusty colour sputum in pneumococcal pneumonia.

Differential diagnoses

- Identify important differential diagnoses including acute bronchitis (viral or bacterial bronchitis), exacerbation of chronic bronchitis, bronchial carcinoma, pulmonary embolism, pulmonary tuberculosis, pneumonia, cardiac failure and bronchiectasis.

Investigations

- Important bedside, laboratory and radiological investigations including U&Es, FBC, CRP, chest x ray, infection screen. Consider other specialist investigations.

Management

- Explain the principles of management including antibiotics and specialist referral.

**CONDITIONS**

- ACUTE BRONCHITIS
- PULMONARY EMBOLISM
- LUNG CANCER
- TUBERCULOSIS
- PNEUMONIA
- BRONCHIECTASIS

## 23. Pain on inspiration

By the end of the block students should be able to:

History

- Take a respiratory history including nature of the chest pain (pain on inspiration), associated symptoms such as haemoptysis, VTE risk factors, travel history and red flags.

Examination

- Carry out general, respiratory, and cardiovascular examination including breath sounds, crepitations, oxygen saturations and associated signs like leg oedema, Wells score / PERC score.

Differential diagnoses

- Identify important differentials including pulmonary embolus, pneumonia, pneumothorax, pericardial disease, lung cancer, costochondritis and pleurisy.

Investigations

- Describe important bedside, laboratory and radiological investigations including D-Dimer, CXR, CTPA, FBC and CRP.

Management

- Understand the principles of management including analgesia, oxygen and treatment of the underlying cause.

**CONDITIONS**

- PULMONARY EMBOLISM
- PNEUMONIA
- PNEUMOTHORAX
- PERICARDIAL DISEASE (INCLUDING PERICARDITIS, PERICARDIAL EFFUSION, CARDIAC TAMPONADE)
- LUNG CANCER

## 24. Sore throat

By the end of the block students should be able to:

History

- Describe features in a patient presenting with a sore throat / upper respiratory symptoms including associated symptoms such as weight loss and fever, red flags and demographics.

Examination

- Carry out a general examination checking for pyrexia, exudates, lymphadenopathy and a respiratory examination.

Differential diagnoses

- Identify important differential diagnoses for upper respiratory symptoms/sore throat including viral (HIV) and bacterial infections (epiglottitis) and peritonsillar abscess. Consider use of FeverPAIN score where indicated.

Investigations

- Describe investigations for upper respiratory symptoms / sore throat including FBC and CRP and screening for infectious mononucleosis as appropriate.

Management

- Explain initial management including advice about airway compromise, antibiotic treatment if needed (bacterial) or safety netting / advice if treatment not needed (viral).

**CONDITIONS**

- UPPER RESPIRATORY TRACT INFECTION
- INFECTIOUS MONONUCLEOSIS (INCLUDING EPSTEIN-BARR VIRUS, CYTOMEGALOVIRUS)
- PHARYNGITIS/TONSILLITIS
- HUMAN IMMUNODEFICIENCY VIRUS
- EPIGLOTTITIS

# Surgery Block Presentations and Learning Outcomes

Below is a list of common and important presentations you should cover during the surgery block in CCE. The presentations are not an exhaustive list; it is to give you an idea of the common conditions you are expected to come across in the clinical environment.

| | |
|---|---|
| **Breast**<br>1. Breast lump<br><br>**Ear, Nose and Throat**<br>2. Epistaxis<br>3. Hearing loss<br>4. Hoarseness and voice change<br>5. Painful ear<br>6. Vertigo<br><br>**Gastrointestinal / Colorectal**<br>7. Abdominal distension<br>8. Abdominal pain (acute and chronic)<br>9. Bleeding per rectum<br>10. Bowel habit change<br>11. Jaundice<br>12. Swallowing problems | **General**<br>13. Lymphadenopathy<br>14. Neck lump<br><br>**Musculoskeletal**<br>15. Lower back pain and sciatica<br>16. Soft tissue injury<br><br>**Ophthalmology**<br>17. Eye pain/discomfort<br>18. Red eye<br>19. Vision change/ loss (acute and gradual)<br><br>**Urology**<br>20. Haematuria<br>21. Scrotal/testicular pain and/or lump/swelling<br>22. Urinary symptoms<br><br>**Vascular**<br>23. Limb claudication<br>24. Shock |

The key learning outcomes are:

- To take an adequate history and understand relevant differentials.
- Carry out necessary examinations and investigations.
- To outline and describe the initial management plans.

**NB: To help focus your learning, we have included some examples of common / important conditions related to each presentation underneath each of them. This is not an exhaustive list and does not limit the assessment of a patient with that presentation. You will also notice the overlap across various presentations.**

# Breast

## 1. Breast lump

By the end of the block students should be able to:

History

- Take a history of a patient with breast lump including characterisation of breast lump, location, pain, associated symptoms and skin changes.

Examination

- Examine the breast for tenderness, erythema, warmth, nipple changes, discharge, etc. as well as understand the anatomy of the breast.

Differential diagnoses

- Identify important differential causes including fibroadenoma, fibrocystic change, breast cancer, breast abscess, mastitis and fat necrosis.
- Identify skin and subcutaneous lesions such as epidermoid cysts and lipomata that may occur in the breast.

Investigations

- Describe relevant investigations including breast USS, mammography, fine needle aspiration, core biopsy

Management

- Explain screening programme for breast cancer and referral to specialist as appropriate.

**CONDITIONS**

- FIBROADENOMA
- BREAST CYSTS
- BREAST CANCER
- BREAST ABSCESS/MASTITIS

# Ear, Nose and Throat

## 2. Epistaxis

By the end of the block students should be able to:

History

- Take a history in a patient with nosebleed (epistaxis) and nasal obstruction including red flags like persistent bleeding, airway obstruction and anticoagulation.

Examination

- Carry out examination of the nose including signs of nasal discharge, nasal blockage

Differential diagnoses

- Identify common and important causes of nosebleed and nasal obstruction including nasal trauma, hypertension, patient on anticoagulant therapy, rupture of mucosa vessels in Little's area, allergic / non-allergic rhinitis, sinusitis, nasal polyps and deviated septum (in nasal obstruction).

Investigations

- Describe relevant investigation including using nasal endoscopy to view the nose

Management

- Explain first aid management of nosebleed and principles of further management of nosebleed. Understand initial management of the common causes of nasal blockage.

**CONDITIONS**

- EPISTAXIS

## 3. Hearing loss

By the end of the block students should be able to:

History

- Take a history including nature and onset of hearing loss, one or both ears, other neurological symptoms, medications, and red flags (such as loss of consciousness, weakness and speech disturbance).

Examination

- Examine a patient with hearing loss including Weber / Rinne's test, neurological examination, cranial nerves, and cerebellar signs

Differential diagnoses

- Identify common causes of conductive hearing loss including cerumen or earwax, foreign bodies, infection or otosclerosis. Also consider congenital abnormalities and sensorineural hearing loss including congenital, infection, Meniere's disease, cerebellar-pontine tumour (acoustic neuroma), vascular, and ototoxic drugs.

Investigations

- Describe relevant investigations including audiometry, blood glucose, viral titres, MRI brain, CT scan and their interpretation

Management

- Explain principles of management of common and important differentials and referral to specialist as appropriate.

**CONDITIONS**

- MENIERES DISEASE
- VESTIBULAR SCHWANNOMA (ACOUSTIC NEUROMA)
- ADVERSE DRUG EFFECTS

## 4. Hoarseness and voice change

By the end of the block students should be able to:

History

- Take a history in a patient with hoarseness of voice including smoking, alcohol, family history, past medical history and red flags such as weight loss and neck lumps.

Examination

- Demonstrate key features in the examination for hoarseness including the anatomical location of the larynx in the neck, neck lumps, cranial nerves and lymph node examinations.

Differential diagnoses

- Describe causes of hoarseness including acute laryngitis, acid reflux, allergies, smoking, vocal overuse, thyroid problems, benign vocal cord cyst or polyps, recurrent laryngeal nerve injury and laryngeal cancer.

Investigations

- Describe appropriate investigations in a patient with hoarseness / voice change e.g. laryngoscopy, fibreoptic scope, and their interpretation

Management

- Explain initial management of differential diagnoses of hoarseness including referral as appropriate.

**CONDITIONS**

- GASTRO-OESPHAGEAL REFLUX DISEASE (INCLUDING BARRETT OESOPHAGUS)
- ALLERGIC DISORDER (INCLUDING FOOD ALLERGY)
- LUNG CANCER
- PHARYNGITIS/TONSILLITIS

## 5. Painful ear

By the end of the block students should be able to:

History

- Take a history including onset, duration, pain, radiation, neurological symptoms, systemic symptoms of infection, medication history, and red flags.

Examination

- Carry out ear examination including otoscopy and mastoid tenderness to distinguish otitis media / externa from mastoiditis.

Differential diagnoses

- Identify important causes of ear pain including local causes (otitis media, otitis externa, mastoiditis) and referred pain including tonsillitis, dental abscess (via the auriculo-temporal branch of the trigeminal nerve), temporo-mandibular arthritis, Herpes / Ramsey Hunt syndrome (via the facial nerve), and carcinoma base of tongue (via the glossopharyngeal nerve).

Investigations

- Describe appropriate investigations in patients with a painful ear.

Management

- Explain initial management including advice, analgesia, and other medications as appropriate

**CONDITIONS**

- OTITIS MEDIA
- OTITIS EXTERNA
- TONSILLITIS

## 6. Vertigo

By the end of the block students should be able to:

History

- Take a history of a patient with vertigo including neurological symptoms, medications, and red flags (such as loss of consciousness, weakness and speech disturbance)

Examination

- Demonstrate key features including examination of the ears, examination of the eyes for nystagmus and neurological examination

Differential diagnoses

- Describe important differentials including vestibular neuronitis, benign paroxysmal positional vertigo, labyrinthitis, Meniere's disease, acoustic neuroma, drug ototoxicity, and brainstem disorders.

Investigations

- Describe relevant bedside, clinical, laboratory and radiological investigations including blood glucose, ECG, CT scan, MRI brain, and their interpretation.

Management

- Explain management including medications, lifestyle advice and safety netting

**CONDITIONS**

- BENIGN PAROXYSMAL POSITIONAL VERTIGO
- MENIERE'S DISEASE
- ACOUSTIC NEUROMA VESTIBULAR SCHWANNOMA (ACOUSTIC NEUROMA)
- ADVERSE DRUG EFFECTS
- OTITIS MEDIA

# Gastrointestinal / Colorectal

## 7. Abdominal distension

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, alcohol history, possibility of pregnancy and red flags.

Examination

- Carry out general examination, abdominal examination (including signs of liver disease) and rectal examination.

Differential diagnoses

- Describe important differential causes for abdominal distension (6 F's): Fat (obesity); Flatus (volvulus, obstruction, pseudo-obstruction); Faeces (obstruction); Fluid (ascites, distended bladder), Foetus; and Functional (bloating e.g. IBS) plus liver cirrhosis, gastric/colorectal cancers and ovarian cancer)
- Explain the physiology involved in abdominal distension and the mechanisms by which ascites may occur.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations including LFTs, abdominal ultrasound, abdominal CT scan and abdominal paracentesis.

Management

- Explain the principles of management including medical or non-medical management as appropriate

**CONDITIONS**

- OBESITY AND PREGNANCY
- INTESTINAL OBSTRUCTION AND ILEUS
- LIVER FAILURE
- GASTRIC CANCER
- COLORECTAL TUMOURS
- IRRITABLE BOWEL SYNDROME
- ASCITES (INCLUDING SPONTANEOUS BACTERIAL PERITONITIS)
- VOLVULUS

## 8. Abdominal pain (acute and chronic)

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, location, duration, characterisation of pain, radiation, any alcohol history and possibility of pregnancy, any change in bowel habit, associated symptoms such as vomiting, red flags such as rectal bleeding, weight loss and aggravating/relieving factors

Examination

- General examination plus careful examination of abdomen for tenderness, rigidity, organomegaly, guarding and bowel sounds, and perform a rectal examination.

Differential diagnoses

- Describe important differentials including appendicitis, biliary disease (biliary colic, cholecystitis, acute cholangitis), hiatus hernia, diverticular disease, peritonitis, gastrointestinal perforation, mesenteric adenitis, pancreatitis, peptic ulcer disease and gastritis, and a 'surgical sieve' approach to differential diagnoses. Consider chronic pancreatitis, pancreatic cancer, constipation, inflammatory bowel disease, chronic PID, other gynaecological causes, as well as functional causes such as non-ulcer dyspepsia and IBS.

Investigations

- Describe relevant investigations including FBC, U & Es, CRP, LFTs, amylase, abdominal ultrasound and abdominal CT.

Management

- Explain management including analgesia, IV fluids and referral as appropriate.
- Explain other initial management including analgesia, laxative types, antibiotics (if required) and referral, if appropriate, with safety netting

**CONDITIONS**

- APPENDICITIS
- GALLSTONES AND BILIARY COLIC
- ACUTE CHOLANGITIS
- ACUTE PANCREATITIS
- PEPTIC ULCER DISEASE AND GASTRITIS
- IRRITABLE BOWEL SYNDROME
- INFLAMMATORY BOWEL DISEASE
- COLORECTAL CANCER
- ECTOPIC PREGNANCY
- DIVERTICULAR DISEASE AND DIVERTICULTIS

## 9. Bleeding per rectum

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, pain, type of bleeding, red flags and risk factors. The history should also include colour, smell and consistency of the stool.

Examination

- Carry out a general examination including blood pressure, signs of anaemia and liver disease plus a full abdominal examination (including rectal examination)

Differential diagnoses

- Describe important differential causes for upper GI bleeding (peptic ulcer disease, gastritis/duodenitis, Mallory-Weiss tear, oesophageal varices, malignancy e.g. oesophageal and gastric cancer) as well as associated risk factors (e.g. NSAIDs and aspirin, alcoholic liver disease).
- Describe important differential causes for lower GI bleeding including diverticular disease, colorectal cancer, haemorrhoids, AVM, perianal abscess and fistula, infectious colitis, intestinal ischaemia, intussusception and inflammatory bowel disease

Investigations

- Describe relevant investigations including FBC, LFTs, upper GI endoscopy, colonoscopy, CT angiography, H. Pylori testing, and understand their interpretation.

Management

- Explain management including IV fluids, blood products if appropriate, medication and referral to specialist care.

**CONDITIONS**

- PEPTIC ULCER DISEASE AND GASTRITIS
- OESOPHEGEAL CANCER
- GASTRIC CANCER
- HAEMORRHOIDS
- ANAL FISSURE
- COLORECTAL CANCER

- DIVERTICULAR DISEASE AND DIVERTICULITIS
- INFLAMMATORY BOWEL DISEASE

## 10. Bowel habit change

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, characterisation of the change in bowel habit, vomiting, red flags such as rectal bleeding, weight loss and aggravating / relieving factors as well as the Bristol stool chart (if appropriate).

Examination

- Carry out a general examination (including lymphadenopathy), abdominal examination (distension, tenderness, bowel sounds, etc.) and rectal examination.

Differential diagnoses

- Describe important differential causes within the GI tract (irritable bowel syndrome, coeliac disease, constipation, intestinal obstruction and ileus, inflammatory bowel disease, infectious diarrhoea, bowel cancer, malabsorption) and outside the GI tract (other types of cancer).

Investigations

- Describe relevant investigations including FBC, CRP, U+Es, endoscopy, colonoscopy and CT scan.

Management

- Explain management including fluid replacement if indicated, communication with patients about screening programmes and referral to a specialist if appropriate.

**CONDITIONS**

- IRRITABLE BOWEL SYNDROME
- INFLAMMATORY BOWEL DISEASE (INCLUDING CROHN DISEASE AND ULCERATIVE COLITIS)
- INFECTIOUS DIARRHOEA (INCLUDING INFECTIVE GASTROENTERITIS)
- COLORECTAL CANCER
- COELIAC DISEASE
- PANCREATIC CANCER
- CONSTIPATION
- MALABSORPTION

## 11. Jaundice

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, progression, red flags such as painless jaundice, weight loss, ascites and social / alcohol history.

Examination

- Carry out general and abdominal examination looking for signs related to jaundice and possible abdominal causes.

Differential diagnoses

- Describe the pathophysiology associated with the development of jaundice and classify the causes of jaundice into pre-hepatic, hepatic and post-hepatic with knowledge of common examples (acute cholangitis, gallstones, haemachromatosis, alcoholic hepatitis, infectious mononucleosis, biliary atresia, hepatic cancer, decompensated liver failure and pancreatic cancer). Distinguish between infectious and mechanical causes of biliary obstruction.

Investigations

- Describe relevant investigations in a patient with jaundice (including interpretation). Identify the components included in LFTs and understand what each represents in terms of liver function and dysfunction. Be aware of additional tests used within the liver screen to further discriminate liver pathologies (hepatitis serology, iron studies, auto-antibodies, alpha1 antitrypsin, USS abdomen). Also be aware of the importance of clotting results with regards to liver dysfunction.

Management

- Explain the principles of initial management of common and important differential diagnoses.

**CONDITIONS**

- ALCOHOL RELATED LIVER DISEASE
- GALLSTONES AND BILIARY COLIC
- CHRONIC LIVER DISEASE (INCLUDING DECOMPENSATION AND CIRRHOSIS)
- ACUTE CHOLANGITIS
- PANCREATIC CANCER
- ADVERSE DRUG EFFECTS

## 12. Swallowing problems

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, pain on swallowing, vomiting, regurgitation, neurological symptoms and red flags such as weight loss.

Examination

- Demonstrate key features in the examination including neck tenderness, swelling, mass and lymphadenopathy, as well as any concerning neurological findings.

Differential diagnoses

- Understand that swallowing difficulties may have infective, neurological, muscular or structural causes.
- Describe important differential causes including benign (e.g. gastro-oesophageal reflux, tonsillitis, oesophageal web); malignant strictures (oesophageal cancer); extrinsic compression; motility disorders (e.g. scleroderma, achalasia); myasthenia gravis and bulbar palsy.

Investigations

- Describe relevant investigations including upper GI endoscopy, oesophageal manometry, barium swallow, CT head and neck, and understand their interpretation.

Management

- Explain the principles of management including medications, SALT assessment, lifestyle advice on diet / alcohol and referral to specialist if appropriate.

**CONDITIONS**

- GASTRO-OESOPHAGEAL REFLUX DISEASE (INCLUDING BARRETT OESOPHAGUS)
- OESOPHAGEAL CANCER
- MOTOR NEURONE DISEASE
- SOMATIC SYMPTOM DISORDER
- MYASTHENIA GRAVIS
- PHARYNGITIS/TONSILLITIS

# General

## 13. Lymphadenopathy

By the end of the block students should be able to:

History

- Take a history timing of lump development, pain and red flags such as weight loss

Examination

- Carry out an examination of the lymphatic drainage system differentiating between generalised lymphadenopathy (presence of palpable lymph nodes in three or more chains) and localised lymphadenopathy.

Differential diagnoses

- Describe possible differential diagnoses for generalised lymphadenopathy including lymphoma, leukaemia, collagen vascular disorders (Lupus, RA), systemic bacterial (e.g. Tonsillitis), viral (e.g. Infectious mononucleosis, HIV), and protozoal infection.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations appropriate to investigate a patient with enlarged lymph node(s) and distinguish between reactive and malignant causes of lymphadenopathy

Management

- Explain the principles of management of common and important differential diagnoses

**CONDITIONS**

- UPPER RESPIRATORY TRACT INFECTION
- HUMAN IMMUNODEFICIENCY VIRUS (HIV)
- LYMPHOMA
- LEUKAEMIA
- SYSTEMIC LUPUS ERYTHMATOSUS
- PHARYNGITIS/TONSILLITIS
- INFECTIOUS MONONUCLEOSIS

## 14. Neck lump

By the end of the block students should be able to describe:

History

- Take a history of the onset of symptoms, duration, smoking and alcohol history and red flags such as rapidly developing lump, airway issues, dysphagia, hoarseness and weight loss.

Examination

- Examine the neck, demonstrating the anatomy of the neck (particularly relating to thyroid gland, lymph nodes and other neck structures) and how to describe neck lumps and lymph nodes.

Differential diagnoses

- Describe common and important differential causes of neck lumps such as cervical lymphadenopathy, goitre, salivary gland disease, branchial cyst, cystic hygroma, thyroglossal cyst and epidermal cyst

Investigations

- Describe relevant investigations including neck ultrasound, lump biopsy and barium swallow.

Management

- Explain the principles of management of neck lumps including referral as appropriate.

**CONDITIONS**

- LYMPHOMA
- HYPERTHYROIDISM/THYROTOXICOSIS
- HYPOTHYROIDISM
- THYROID CANCER

- THYROID NODULES

## Musculoskeletal

### 15. Lower back pain and sciatica

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, characterisation of pain, trauma, past medical history and red flags such as saddle anaesthesia, incontinence, foot drop and weakness.

Examination

- Demonstrate key features in the examination of the back including tenderness, swelling, erythema, warmth, range of movement, etc. Do a full upper and lower limb examination, including plantar reflexes and PR.

Differential diagnoses

- Describe the anatomy of the spine and the mechanisms by which back pain and radicular pain (sciatica) may occur
- Describe important differential causes for back pain including mechanical back pain, disc herniation, lumbar spine stenosis, vertebral trauma / fracture, spondyloarthropathies (inflammatory e.g. Ankylosing spondylitis), spinal tumour, spinal infection, spondylolisthesis, osteoarthritis, metastatic disease and cauda equina syndrome.

Investigations

- Describe relevant investigations including spine X-ray / MRI, USS, Bloods (WCC, ESR, CRP) and their interpretation

Management

- Explain initial management including analgesia, physiotherapy and lifestyle advice.

**CONDITIONS**

- RADICULOPATHIES
- SERONEGATIVE SPONDYLOARTHROPATHIES (ANKYLOSING SPONDYLITIS)
- SPINAL CORD COMPRESSION
- SPINAL CORD INJURY
- OSTEOARTHRITIS
- FRACTURES (INCLUDING PATHOLOGICAL FRACTURES)
- METASTATIC CANCER

### 16. Soft tissue injury

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression in patients suffering from hip, knee and ankle problems, shoulder or elbow problems, neck pain, muscle strength along the whole upper limb, (including grip strength) including pain, weakness and limitation of movement..

Examination

- Demonstrate important findings in the examination of the hip, knee, neck, shoulder and elbow joints which help differentiate between causes

Differential diagnoses

- Describe the anatomy of the lower limb and upper limb, including the vascular and nerve supply
- Describe differential diagnoses for upper and lower limb disorders including soft tissue injuries, nerve, tendon, vascular injuries, and nerve compression.

Investigations

- Describe relevant investigations including X-Rays, doppler ultrasound and nerve conduction studies.

Management

- Explain the principles of management in patients with hip, knee, shoulder and elbow problems including analgesia, physiotherapy and lifestyle advice.

**CONDITIONS**

- SOFT TISSUE INJURY
- PERIPHERAL NERVE INJURY/PALSIES

## Ophthalmology

### 17. Eye pain/discomfort

By the end of the block students should be able to:

History

- Take a history of a patient with red eye, eye pain and discomfort including associated features, trauma, infective symptoms, past medical history and medications.

Examination

- Demonstrate examination of the eye including the anatomy and physiology of the orbit, ophthalmoscopy (eliciting corneal and pupillary reflexes) and neurological examination.

Differential diagnoses

- Describe common differentials including blepharitis, infective keratitis, periorbital and orbital cellulitis, scleritis, herpetic eye disease, acute iritis, corneal abrasion, narrow angle glaucoma, trauma and allergy. Understand which of these could be sight-threatening.

Investigations

- Describe relevant investigations in a patient with eye pain

Management

- Explain the principles of management of common causes of red eye and eye pain including referral to ophthalmology.

**CONDITIONS**

- CONJUNCTIVITIS
- INFLAMMATORY CONDITIONS OF THE EYE (SCLERITIS, EPISCLERITIS, UVEITIS)
- ACUTE GLAUCOMA
- PERI-ORBITAL AND ORBITAL CELLULITIS
- INFECTIVIE KERATITIS
- BLEPHARITIS

### 18. Red eye

By the end of the block students should be able to:

History

- Take a history of a patient with red eye, eye pain and discomfort including associated features, trauma, infective symptoms, past medical history and medications.

Examination

- Demonstrate examination of the eye including the anatomy and physiology of the orbit, ophthalmoscopy (eliciting corneal and pupillary reflexes) and neurological examination.

Differential diagnoses

- Describe common differentials including acute conjunctivitis, blepharitis, infective keratitis, periorbital and orbital cellulitis, scleritis, iritis, benign eyelid disorders, herpetic eye disease, acute iritis, corneal abrasion, narrow angle glaucoma, trauma and allergy. Understand which of these could be sight-threatening.

Investigations

- Describe relevant investigations in a patient with red eye

Management

- Explain the principles of management of common causes of red eye and eye pain including referral to ophthalmology.

**CONDITIONS**

- CONJUNCTIVITIS
- INFLAMMATORY CONDITIONS OF THE EYE (SCLERITIS, EPISCLERITIS, UVEITIS)
- ACUTE GLAUCOMA
- PERI-ORBITAL AND ORBITAL CELLULITIS
- INFECTIVE KERATITIS
- SUBCONJUNCTIVAL HAEMORRHAGE

### 19. Vision change/loss (acute and gradual)

By the end of the block students should be able to:

History

- Take a history of a patient with acute or gradual change in or loss of vision including onset, duration, progression, presence or absence of pain, neurological symptoms and history of trauma.

Examination

- Demonstrate examination of the eye including the anatomy and physiology of the orbit, ophthalmoscopy and neurological examination.

Differential diagnoses

- Describe common and important differential diagnoses such as retinal detachment, optic neuritis, retina haemorrhage, central retina vascular occlusion, visual field defects, iritis, macular degeneration, scleritis, cataracts, chronic glaucoma, diabetic eye disease, and attacks of acute narrow angle glaucoma.
- Understand which of these are ophthalmological emergencies.

Investigations

- Describe relevant investigations in a patient with acute change in or loss of vision

Management

- Explain the principles of management of visual loss including referral to ophthalmology

**CONDITIONS**

- RETINAL DETACHMENT
- CENTRAL RETINAL ARTERIAL OCCLUSION
- OPTIC NEURITIS
- MACULAR DEGENERATION
- TRANSIENT ISCHAEMIC ATTACK (TIA)
- ACUTE GLAUCOMA
- VISUAL FIELD DEFECTS
- CATARACTS

## Urology

### 20. Haematuria

By the end of the block students should be able to:

History

- Take a history of type, onset, duration of symptoms including pain during or after urination, presence of blood, fluid intake, and red flags as well as other causes of red urine like menstrual blood, food and medications (beetroot, rifampicin, clofazimine, anticoagulants)

Examination

- Describe key features in the examination including abdominal / renal angle tenderness, prostate examination and rectal examination where appropriate as well as pelvic examination in women if appropriate.

Differential diagnoses

- Describe important differential causes of haematuria (UTI, tumours – renal / bladder cancers; stones – renal / ureteric; renal disease – Goodpasture's syndrome, Granulomatosis with polyangiitis, post-streptococcal glomerulonephritis; trauma – kidney / urethra; iatrogenic – catheterisation, prostate – BPH, cancer) and dysuria (including lower urinary tract infection, inflammation – cystitis, urethritis).

Investigations

- Describe relevant investigations including urinalysis, urine culture, cytology, PSA, bladder scan for residual urine volume, USS (pelvic, rectal, KUB), cystoscopy, CT urogram and their interpretation

Management

- Explain the principles of management including medications for pain relief, antibiotics and referral as appropriate.
- Explain the principles of management of urinary retention including catheterisation and treatment of underling cause

**CONDITIONS**

- URINARY TRACT INFECTION
- PYELONEPHRITIS
- BLADDER CANCER
- URINARY TRACT CALCULI
- IgA VASCULITIS
- ADVERSE DRUG EFFECTS

## 21. Scrotal/testicular pain and/or lump/swelling

By the end of the block students should be able to describe:

History

- Take a history of the onset of symptoms, duration, progression, pain, and red flags

Examination

- Carry out abdominal and genital examination including tenderness, reducibility and cremasteric reflex. Note the lie of the testicle, check for erythema and swelling and feel for any knots in the spermatic cord..

Differential diagnoses

- Describe important differential causes for groin swellings (including hernias, lymph nodes), scrotal swelling (inguinal hernia, hydrocoele, varicocoele, testicular tumours, epididymal cyst), and scrotal pain (testicular torsion, epidiymo-orchitis, strangulated hernia).
- Explain the anatomy and embryology of the inguinal canal and scrotum

Investigations

- Describe relevant investigations including urinalysis, abdominal / scrotal ultrasound and abdominal CT.

Management

- Explain initial management including pain relief, surgical referral when appropriate e.g. testicular torsion as an emergency

**CONDITIONS**

- TESTICULAR CANCER
- TESTICULAR TORSION
- HYDROCOELE/VARICOCELE/ EPIDIDYMAL CYST
- HERNIAS
- PROSTATITIS, EPIDIDYMITIS AND ORCHITIS

## 22. Urinary symptoms

By the end of the block students should be able to:

History

- Take a history of type, onset, duration of symptoms including pain during or after urination, presence of blood, fluid intake, risk factors for urinary retention and red flags

Examination

- Describe key features in the examination including abdominal / renal angle tenderness, prostate examination and rectal examination where appropriate as well as pelvic examination in women if appropriate.

Differential diagnoses

- Describe important differential causes of urinary symptoms such as UTI, renal tract tumours, renal tract calculi, renal disease, nephrotic syndrome BPH, UTI and inflammation of the prostate.
- Explain the mechanisms by which urinary retention occurs: obstruction of the urethra, weakened bladder muscle and innervation problems.
- Describe common and important causes of urinary retention including BPH, urethral stricture, medication (e.g. anticholinergics, tricyclic antidepressants, calcium channel blocker), damage to the nervous system (e.g. Parkinson's, multiple sclerosis and Alzheimer's disease). In women consider large cystocele, pregnancy, fibroid or ovarian cyst obstructing the urethra.

Investigations

- Describe relevant investigations including urinalysis, urine culture, cytology, PSA, bladder scan for residual urine volume, USS (pelvic, rectal, KUB), cystoscopy, CT urogram and their interpretation

Management

- Explain the principles of management including medications for pain relief, antibiotics and referral as appropriate.
- Explain the principles of management of urinary retention including catheterisation and treatment of underling cause

**CONDITIONS**

- URINARY TRACT INFECTION
- BLADDER CANCER
- URINARY TRACT CALCULI
- BENIGN PROSTATIC HYPERPLASIA
- SPINAL CORD COMPRESSION
- ADVERSE DRUG EFFECTS

# Vascular

## 23. Limb claudication

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, exercise tolerance, progression, smoking history, cardiac disease and medication history.

Examination

- Carry out a general examination and limb examination including peripheral pulses and ankle brachial pressure index.

Differential diagnoses

- Describe the arterial supply to the lower limb and understand epidemiology of peripheral arterial disease, arterial thrombosis and risk factors. Describe common causes of arterial ulcers, venous ulcers and gangrene..

Investigations

- Describe relevant investigations to investigate a patient with peripheral arterial disease including an Ankle Brachial Pressure Index (ABPI), USS Doppler, limb angiography, and their interpretation.

Management

- Explain the principles of management of peripheral arterial disease including lifestyle, medications and surgical interventions

**CONDITIONS**

- PERIPHERAL VASCULAR DISEASE
- ANEURYSMS, ISCHAEMIC LIMB AND OCCLUSIONS
- SKIN ULCERS (INCLUDING ARTERIAL, VENOUS AND NEUROPATHIC ULCERS)

## 24. Shock

By the end of the block students should be able to:

History

- Key features of the history in a patient with shock- including the types of shock

Examination

- Carry out the examination of a patient with shock including A-E assessment demonstrating the understanding of shock as a clinical syndrome characterised by inadequate systemic and tissue perfusion.

Differential diagnoses

- Describe common / important causes of shock including hypovolaemic (haemorrhage, aortic aneurysm, aortic dissection, toxic shock syndrome and other fluid losses), cardiogenic (MI, arrhythmias, etc.), obstructive (tension pneumothorax, cardiac tamponade), and distributive shock (anaphylactic and neurogenic shock)
- Understand the categories of hypovolaemic shock.

Investigations

- Describe relevant investigations including FBC, Group and save, X-match, blood cultures, serum lactate, chest x-ray, ultrasound, echocardiogram, and CT scan – all depending upon presentation

Management

- Explain the principles of management of different types of shock including Sepsis 6 bundle (oxygen, IV fluids, blood cultures, IV antibiotics, lactate/bloods and urine output). Blood transfusion in hypovolaemic shock and awareness of the massive haemorrhage protocol.

**CONDITIONS**

- HYPOVOLAEMIA/VOLUME DEPLETION
- CARDIAC ARREST
- PNEUMOTHORAX
- ANAPHYLAXIS
- SEPSIS (INCLUDING NEUTROPENIC SEPSIS)
- SPINAL CORD INJURY
- AORTIC DISSECTION
- TOXIC SHOCK SYNDROME

# Specialties Block Presentations and Learning Outcomes

Below is a list of common and important presentations you should cover during medicine block in CCE. The presentations are not an exhaustive list; it is to give you an idea of the common conditions you are expected to come across in the clinical environment.

**Child health**

1. Abnormal development/developmental delay
2. The sick child

**Care of the elderly**

3. Confusion (acute and chronic)
4. Falls
5. Frailty

**Dermatology**

6. Skin lesion
7. Skin rash (acute and chronic)
8. Skin ulcers

**Haematology**

9. Bruising
10. Pallor of the skin/conjunctiva

**Mental health**

11. Altered mood/Psychosis
12. Generalised anxiety disorder/Phobias/OCD
13. Memory loss
14. Substance misuse

**Other**

15. Pain management (acute and chronic)

**Rheumatology**

16. Joint pain/swelling/stiffness (acute and chronic)

**Women's health: Gynaecology**

17. Abnormal cervical smear result
18. Amenorrhea, dysmenorrhea and abnormal vaginal bleeding.
19. Contraception request / advice
20. Urethral discharge and genital ulcer/warts
21. Vaginal discharge

**Women's health: Obstetrics**

22. Infant feeding problems
23. Labour
24. Normal pregnancy / antenatal care

The key learning outcomes are:

- To take an adequate history and understand relevant differentials
- Carry out necessary examinations and investigations
- To outline and describe the initial management plans

**NB: To help focus your learning, we have included some examples of common / important conditions related to each presentation underneath each of them. This is not an exhaustive list and does not limit the assessment of a patient with that presentation. You will also notice the overlap across various presentations.**

# Child Health

## 1. Abnormal development / developmental delay

By the end of the block students should be able to:

History

- Take a developmental history covering normal developmental domains / milestones such as vision, hearing, speech, social interaction and walking, as well as social history and safeguarding.

Examination

- Demonstrate key features of the examination to assess normal development.

Differential diagnoses

- Identify failure to thrive, its common causes and other reasons for developmental delay.

Investigations

- Describe the relevant investigations to investigate a child with developmental delay.

Management

- Explain the principles of management of important differential diagnoses of developmental delay.

**CONDITIONS**

- DOWN SYNDROME
- CEREBRAL PALSY AND HYPOXIC-ISCHAEMIC ENCEPHALOPATHY
- MALNUTRITION
- CYSTIC FIBROSIS
- MUSCULAR DYSTROPHIES
- AUTISM SPECTRUM DISORDER (ASD)

## 2. The sick child

By the end of the block students should be able to:

History

- Take a history of illness in child including onset, duration, associated symptoms, urinary output, past medical history, illness of other family members, immunisation status, recent travel, etc.

Examination

- Identify key features of the examination which help differentiate between various causes of this presentation. Understand the NICE guidance for the 'Traffic light system' for paediatric examination and the unwell child.

Differential diagnoses

- Describe important causes of illness in children (including viral infection, otitis media, tonsillitis, pneumonia, UTI, influenza, cellulitis, dehydration, Kawasaki's disease, Henoch-Schonlein purpura, Toxic shock syndrome, peri-orbital and orbital cellulitis, septic arthritis, Mumps, Measles, Rubella, leukaemia, peritonitis, viral gastroenteritis, septicaemia and meningitis).
- Understand that children of different ages may need different investigations.

Investigations

- Describe investigations appropriate to investigate a child with fever e.g. septic screen (including interpretation), or where a child may not require investigations.

Management

- Understand A-E assessment. Explain the principles of management of fever in a child, bearing in mind most febrile children have a brief self-limiting viral infection. Know simple measures of treating a self-limiting viral infection.

**CONDITIONS**

- OTITIS MEDIA
- PHARYNGITIS/TONSILLITIS
- FEBRILE CONVULSIONS
- URINARY TRACT INFECTION
- MENINGITIS
- CELLULTIS
- HYPOVOLAEMIA/VOLUME DEPLETION
- INFLUENZA

## Care of the elderly

### 3. Confusion (acute and chronic)

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression in confusion including eliciting red flags such as neurological symptoms or head injury.
- Also consider taking a collateral history from family or next of kin.

Examination

- Undertake general and neurological assessment in a patient with confusion / delirium

Differential diagnoses

- Describe common causes of delirium/acute and chronic confusion such as alcohol, pain, drugs (opioids, benzodiazepines, antipsychotics), hypoxia, hypercapnia, metabolic (hypo/hyperglycaemia, hyponatraemia, hypercalcaemia of malignancy), urinary retention, CNS infection (brain abscess, encephalitis, meningitis), Wernicke's encephalopathy, intracranial injury, hyper and hypothermia, urinary tract infection, dementias and constipation.
- Understand confusion as global impairment of mental function and delirium as an abrupt decline in cognitive function that follows a fluctuating course.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations to investigate a patient with acute confusion / delirium (e.g. Confusion Assessment Method, Abbreviated Mental Test, Mini-Mental State Examination, metabolic screen, U&Es, urinalysis, FBC, CRP, and calcium).

Management

- Explain the management of common causes of confusion and delirium.

**CONDITIONS**

- SEPSIS
- ADVERSE DRUG EFFECTS
- HYPOGLYCAEMIA
- DELIRIUM
- SUBDURAL HAEMATOMA
- HYPERCALCAEMIA
- DEMENTIAS (INCLUDING ALZHEIMER DEMENTIA, LEWY-BODY DEMENTIA, FRONTOTEMPORAL DEMENTIA, VASCULAR DEMENTIA)
- ENCEPHALITIS

### 4. Falls

By the end of the block students should be able to:

History

- Take a history of the preceding symptoms, how the fall happened, dizziness, loss of consciousness, any injuries sustained, unsteadiness of gait, risk factors, home environment, medications, social, family, and past medical history, including previous history of falls.

Examination

- Examine a patient with falls and identify clinical features which may help develop appropriate differential diagnoses including complications such as lacerations, fractures, and head injuries.

Differential diagnoses

- Describe possible differential causes of fall including mobility/balance problems, stroke, syncope, muscle weakness, visual impairment, cognitive impairment, depression, alcohol misuse, chronic health conditions (e.g. heart disease, hypotension), medications (e.g. benzodiazepines), crystal and non-crystal arthropathy, delirium, polypharmacy, and home hazards.

Investigations

- Describe relevant investigations of a patient with fall including ECG, lying and standing blood pressures, blood glucose, bloods (where relevant), X-rays, MRI scan, LFTs, including their interpretation.
- Also consider doing a CK if long lie.

Management

- Explain the principles of management of falls including, pain relief, falls risk assessment, prevention advice, medication review, occupational and physiotherapy review and social care support (home hazard assessment / adaptations).

**CONDITIONS**

- SYNCOPE (INCLUDING VASOVAGAL, CARDIAC)
- ADVERSE DRUG EFFECTS
- PARKINSON DISEASE
- VISUAL FIELD DEFECTS
- STROKE
- PERIPHERAL NERVE INJURIES/PALSIES
- OSTEOARTHRITIS

## 5. Frailty

By the end of the block students should be able to:

History

- Identify key features in the history relating to frailty / chronic disability that would support the development of appropriate differential diagnoses.

Examination

- Describe key features in the examination of a frail patient or patient with chronic disability.

Differential diagnoses

- Recognise the possibility of multiple sclerosis, Parkinson's disease, and motor neurone disease in patients presenting with neurological symptoms and relate the major clinical findings to the underlying pathology. Also consider how chronic kidney disease, osteoporosis, metastatic disease and osteoarthritis may contribute to frailty.
- Consider the clinical frailty scoring system (CFS) and how polypharmacy may affect the patient.

Investigations

- Describe investigations to investigate a patient presenting with symptoms of these conditions (including their interpretation).

Management

- Explain the principles of management of frailty and chronic disability and the role of the multidisciplinary team.

**CONDITIONS**

- PARKINSONISM (INCLUDING PARKINSON'S DISEASE)
- MULTIPLE SCLEROSIS
- MOTOR NEURONE DISEASE
- MALNUTRITION
- ADVERSE DRUG EFFECTS
- DEMENTIAS (INCLUDING ALZHEIMER DEMENTIA, LEWY-BODY DEMENTIA, FRONTOTEMPORAL DEMENTIA, VASCULAR DEMENTIA)
- METASTATIC CANCER

## Dermatology

### 6. Skin lesion

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression as well as red flags.

Examination

- Describe the anatomy of the skin and its three layers and describe skin lumps in terms of location and morphology
- Describe the examination findings in a patient with skin lump or lesion (**A**symmetry, **B**order irregularity, **C**olour variation, **D**iameter, **E**volving) to generate appropriate differentials.

Differential diagnoses

- Identify common benign skin lumps including warts (verruca), seborrheic warts, lipoma, ganglion cysts, keloids, dermatofibroma, acne vulgaris and naevi.
- Describe pre-malignant and malignant skin conditions, including basal cell carcinoma, Bowen's disease (intra-epidermal carcinoma), squamous cell carcinoma and malignant melanoma.

Investigations

- Describe relevant investigations appropriate to investigate a patient with skin lump or lesion including biopsy.

Management

- Explain the principles of management of common differential diagnoses.
- Explain the mechanism by which ultra-violet light leads to the development of skin malignancies.

**CONDITIONS**

- CUTANEOUS WARTS
- LIPOMA
- MALIGNANT/PRE-MALIGNANT SKIN LESIONS (INCLUDING BOWEN DISEASE, MALIGNANT MELANOMA, BASAL CELL CARCINOMA, SQAUMOUS CELL CARCIONOMA)
- ACNE VULGARIS

### 7. Skin rash (acute and chronic)

By the end of the block students should be able to:

History

- Identify the key features of the history including duration of onset (acute or chronic), triggers and occupational / other risk factors such as systemic disease.

Examination

- Examine a patient with skin rash (with or without pruritus), describe the rash in a systematic way (site / distribution; morphology - shape, pattern) and configuration (linear, grouped, annular) to generate appropriate differentials.

Differential diagnoses

- Describe causes of acute skin rashes including erythroderma, dermatitis (contact, atopic seborrheic), drug eruptions (including Stevens-Johnson syndrome, toxic epidermal necrolysis), urticarial, infective (e.g. herpes, varicella, impetigo), viral exanthema, cutaneous fungal infection and purpuric (meningococcal, septic emboli).
- Describe the causes of severe pruritus +/- rash such as scabies, urticaria, eczema, insect bites, folliculitis, dermatitis herpetiformis and lichen planus.
- Recognise viral skin infections (e.g. viral warts, molluscum contagiosum, herpes simplex / zoster); bacterial infections (e.g. folliculitis, impetigo, streptococcal cellulitis, necrotising fasciitis) and fungal infections (e.g. candidiasis, tinea and pityriasis versicolor).
- Describe causes of chronic skin rashes including acne vulgaris, psoriasis, seborrheic warts, other cutaneous warts and also infective causes – fungal (tinea, pityriasis versicolor, trichophyton), TB (lupus vulgaris), HPV infection
- Also consider systemic causes such a coeliac disease, CKD, diabetes mellitus, chronic inflammatory conditions, autoimmune disease and vasculitis.

Investigations

- Describe clinical, laboratory and radiological investigations appropriate to investigate a patient with pruritus and rash including FBC, LFT, U & Es, patch testing, skin scraping for microscopy/culture and serology for autoimmune disease.

Management

- Describe the principles of management of common skin problems such as eczema and psoriasis.

**CONDITIONS**

- ATOPIC DERMATITIS/ECZEMA
- SCABIES
- PSORIASIS
- ADVERSE DRUG REACTION
- VIRAL EXANTHAEMA
- CUTANEOUS FUNGAL INFECTION
- SARCOIDOSIS
- SYSTEMIC LUPUS ERYTHEMATOSUS
- TUBERCULOSIS
- SKIN MANIFESTATIONS OF SYSTEMIC DISEASE (ACANTHOSIS NIGRICANS, LIVEDO RETICULARIS AND PETECHAIE/PURPURA-Iga VASCULITIS)
- STEVEN-JOHNSON SYDROME/ TOXIC EPIDERMAL NECROLYSIS

## 8. Skin ulcers

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, and progression of the skin lesion/infection, including risk factors for the development of venous, arterial and neuropathic ulcers as well as pressure sores. Consider asking about contacts of infectious skin diseases.

Examination

- Examination of the skin looking for signs of venous or arterial disease as well as general examination.
- Examine a patient and describe the lesion in a systematic way (site / distribution; morphology - shape, pattern); configuration (linear, grouped, annular) to generate appropriate differentials.

Differential diagnoses

- Understand how to differentiate between pressure sores, venous and arterial ulcers, and gangrene.

Investigations

- Describe investigations appropriate to investigate skin infections and ulcers

Management

- Describe the principles of management for the common types of skin infection and ulcer.

**CONDITIONS**

- HERPES SIMPLEX VIRUS
- VARICELLA ZOSTER VIRUS
- SKIN ULCERS (INCLUDING ARTERIAL, VENOUS AND NEUROPATHIC ULCERS)
- GANGRENE

## Haematology

### 9. Bruising

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, medications, social history, past medical history, family history, medications and risk factors which may help differentiate between causes of bleeding, bruising or hypercoagulability.

Examination

- Make a clinical assessment of a patient with suspected thrombo-embolic disease, and the scoring system used to evaluate risk of thromboembolism (e.g. Wells score)
- Examine for evidence of obvious bruising, pallor, lymphadenopathy and any haemarthrosis.

Differential diagnoses

- Explain the clotting pathways and identify points in the pathways associated with common bleeding and hyper-coagulation disorders (such as disseminated intravascular coagulation).
- Explain the inheritance of common genetic bleeding (e.g. Haemophilia, von Willebrand disease) and the risk factors for hyper-coagulation disorders.

Investigations

- Describe investigations to investigate a patient with bleeding tendency (clotting screen, coagulation factor assay, VWF antigen) and those that would help identify an underlying cause for thrombo-embolism. (autoimmune screen, Factor V Leiden)

Management

- Explain at which point in the pathway common anti-coagulant and anti-platelet drugs work; consider their risks, benefits and side effects.

**CONDITIONS**

- COAGULATION DISORDERS (INCLUDING HAEMOPHILIA, VON WILLEBRAND DISEASE AND THROMBOPHILIA, AND SECONDARY TO ILLNESS OR MEDICATION)
- PATIENT ON ANTI-COAGULANT THERAPY
- DISSEMINATED INTRAVASCULAR COAGULATION (DIC)

### 10. Pallor of the skin/conjunctiva

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression including fatigue, bleeding, palpitations, chest pain, shortness of breath, diet, and red flags such as weight loss and night sweats.

Examination

- Perform a general examination of a patient eliciting clinical signs of anaemia and any other red flags such as lymphadenopathy or cachexia.

Differential diagnoses

- Describe common types of anaemia (iron deficiency, B12 and folate deficiency), haemolytic anaemia, haemoglobinopathies, hyposplenism, pancytopaenia, and leukaemia, the morphological patterns and their underlying causes. Understand the normal requirements of erythropoiesis.

Investigations

- Describe investigations appropriate to investigate a patient with anaemia including FBC, serum $B_{12}$ and folate levels, potentially blood film, and their interpretation.

Management

- Explain the principles of management of patients with common anaemias (iron deficiency, $B_{12}$ and folate deficiency).

**CONDITIONS**

- ANAEMIA
- VITAMIN B12 DEFICIENCY AND/OR FOLATE DEFICIENCY
- CHRONIC KIDNEY DISEASE
- HAEMOGLOBINOPATHIES
- HYPOSPLENISM/SPLENECTOMY
- PANCYTOPAENIA

# Mental health

## 11. Altered mood /psychosis

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, progression and in particular screening questions that help recognise people at risk of depression, mania or psychosis (those who may have harmful risk factors e.g. isolation). Be aware of the social stigma of mental illness.

Examination

- Assess depression severity using commonly used tools such as PHQ 9. Be able to perform a mini mental state examination.

Differential diagnoses

- Understand that depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings, and sense of well-being. It is a broad and heterogeneous diagnosis, which has depressed mood and/or loss of pleasure in most activities central to it.
- Understand that psychosis is a mental health problem that causes people to perceive or interpret things differently from those around them. This might involve hallucinations or delusions as well as disturbed, confused, disrupted patterns of thought and/or lack of insight
- Describe the criteria for diagnosis of depression/psychotic disorders using the DSM or ICD classification system.

Investigations

- Describe investigations useful in looking for an organic cause for psychiatric problems e.g. TFTs for hypothyroidism

Management

- Describe the derangements in neurotransmitters in psychiatric illness
- Explain the principles of management including medication, CBT, social support and the long-term effects of psychiatric illness on physical health.

**CONDITIONS**

- DEPRESSION
- BIPOLAR AFFECTIVE DISORDER (INCLUDING MANIA/HYPOMANIA)
- SCHIZOPHRENIA
- DELUSIONAL DISORDER
- HYPOTHYROIDISM

## 12. Generalised anxiety disorder/Phobias/OCD

By the end of the block students should be able to:

History

- Take a detailed history regarding anxiety, phobias and OCD symptoms. Characterise risk factors and severity of symptoms. Be able to assess capacity, and protective/non protective factors.

Examination

- Perform a mental state examination (MSE) and use screening tools for anxiety and depression (e.g. GAD-7) to give diagnosis and severity.

Differential diagnoses

- Understand the definitions of anxiety (generalised, PTSD), somatisation, acute stress reaction, phobias and OCD, plus epidemiological classifications and their manifestations.

Investigations

- Describe investigations appropriate to investigate a patient with anxiety, phobias and OCD (including their interpretation) e.g. TFTs in a patient with anxiety.

Management

- Explain the principles of management of anxiety, phobias and OCD including the biopsychosocial model to manage generalised anxiety disorder.

**CONDITIONS**

- GENERALISED ANXIETY DISORDER
- OBSESSIVE COMPULSIVE DISORDER
- PHOBIAS (INCLUDING AGORAPHOBIA)
- PANIC DISORDER
- HYPERTHRYOIDISM/THYROTOXICOSIS
- SOMATIC SYMPTOM DISORDER

## 13. Memory loss

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression of memory loss and chronic confusion and identify features that supports the development of appropriate differential diagnoses (e.g. tremor for FTD)

Examination

- Carry out a general and neurological examination of a patient with memory loss and chronic confusion.
- Do an MMSE or similar scoring system.

Differential diagnoses

- Describe common and important causes of memory loss:

1). Chronic cognitive impairment (Alzheimer's, vascular disease) 2). Reversible causes (Vitamin B12 / folate deficiency, hypothyroidism, normal pressure hydrocephalus, neurosyphilis, Wilson's disease, hemochromatosis) and 3). Other less common causes (multiple sclerosis, Korsakoff's psychosis, Huntington's disease, frontal-temporal dementia).

Investigations

- Describe investigations appropriate to investigate a patient with memory loss / dementia including 6CIT, MRI brain, TFTs, serum $B_{12}$ and folate, and their interpretation.

Management

- Explain the principles of management of common differential diagnoses including medication and social / home support.
- Explain dementia as a chronic progressive decline in cognitive function without disturbance of consciousness.

**CONDITIONS**

- DEMENTIAS (INCLUDING ALZHEIMER DEMENTIA, LEWY-BODY DEMENTIA, FRONTOTEMPORAL DEMENTIA, VASCULAR DEMENTIA)
- VITAMIN B12 AND/OR FOLATE DEFICIENCY
- HYPOTHYROIDISM
- MULTIPLE SCLEROSIS
- WERNICKE'S ENCEPHALOPATHY/KORSAKOFF SYNDROME

## 14. Substance misuse

By the end of the block students should be able to:

History

- Describe key features in the history (including the use of CAGE and FAST questionnaires for alcohol) as well as asking for any patient symptoms of liver disease.

Examination

- Do full general, abdominal, and cardiovascular exam. Look for key features in the examination findings that would support the development of appropriate differential diagnoses of drug and alcohol abuse.

Differential diagnoses

- Explain to the patient the risks of alcohol addiction and drug addiction, gastritis, pancreatitis, alcoholic hepatitis, hepatitis B and C, HIV, chronic liver disease, cirrhosis, seizures, hypertension, Wernicke's encephalopathy, malnutrition.
- Explain to the patient the risk of drug abuse: infections – STDs, HIV, Hepatitis B&C, lung abscess; injury – thrombophlebitis, DVT; overdose – rhabdomyolysis/renal failure and respiratory failure, as well as brain abnormalities with alcohol and substance misuse.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations would be appropriate to investigate a patient with drug and alcohol abuse including LFTs, GGT, amylase, drug screening, infection screen, USS, CT head and endoscopies.

Management

- Explain the principles of management of substance / alcohol abuse (including epidemiology, risk factors), prevention strategies and the support available including neurological intervention.
- Outline the psychosocial perspectives and epidemiology of illegal drugs of abuse (cannabis, heroin, cocaine, 'legal highs'), their sources, symptoms of use, and clinical impact.
- Know where to refer for alcohol and drug misuse.

**CONDITIONS**

- DRUG OVERDOSE

- MALNUTRITION
- RESPIRATORY FAILURE
- INFECTIVE ENDOCARDITIS
- ACUTE PANCREATITIS
- LIVER FAILURE
- HUMAN IMMUNODEFICIENCY VIRUS (HIV)

## Other

### 15. Pain management - acute and chronic

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression including characterisation of pain (type, location, duration, radiation) e.g. SOCRATES

Examination

- Examine a patient to characterise sources and types of pain.

Differential diagnoses

- Explain the pathophysiology of pain, including pain pathways for somatic and neuropathic pain.
- Consider potential underlying causes of pain such as crystal arthropathy, ankylosing spondylitis, osteomalacia, osteomyelitis, arterial ulcers, diabetic neuropathy, polymyalgia rheumatica, radiculopathies, rheumatoid arthritis and cancers.

Investigations

- Describe bedside, clinical, laboratory and radiological investigations for various types of pain, as appropriate.

Management

- Describe pharmacological and non-pharmacological interventions for pain relief, and their mechanisms of action.
- Describe which analgesic approach would be most appropriate for common cases of pain using the WHO pain ladder and the principles of management of neuropathic pain.
- Identify drug classes commonly used in the management of pain: their mechanisms of action and common side effects (paracetamol, non-steroidal anti-inflammatory drugs, opiates).

**CONDITIONS**

- FIBROMYALGIA
- LOWER BACK PAIN AND SCIATICA
- SICKLE CELL DISEASE
- TRIGEMINAL NEURALGIA
- OSTEOARTHRITIS
- COLORECTAL CANCER
- RHEUMATOID ARTHRITIS

## Rheumatology

### 16. Joint pain/swelling/stiffness (acute and chronic)

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration, characterisation of pain, trauma, and history of autoimmune conditions, as well as any systemic symptoms.

Examination

- Carry out an examination of the joint including tenderness, erythema, warmth, range of movement and systemic signs
- Describe key features of the examination findings including multi-system manifestations of autoimmune processes (e.g. bowel, skin and eyes) and assess severity of hip/knee degenerative changes.
- In small joint disease, explore handedness and functionality

Differential diagnoses

- Describe joint anatomy and demonstrate understanding that joint swelling / pain may arise from periarticular structures (bursae, tendons, muscles) or the joint (synovitis, effusion) and may involve one or more joints.
- Describe important differentials including bursitis, tendinopathies, septic arthritis, compartment syndrome, trauma (haemarthrosis, limb fractures-including pathological fracture), crystal arthropathy (gout, pseudo-gout), reactive arthritis, seronegative spondyloarthropathies, bone cancer and secondaries.

Investigations

- Describe relevant investigations including joint X-ray, USS, joint aspiration, bloods (WCC, ESR, CRP, ACPA, autoimmune screens) and their interpretation.
- Describe relevant investigations including autoantibodies (HLA-B27, rheumatoid factor, anti-nuclear antibodies etc), joint aspiration and interpret the major radiological changes of OA (hip and knee) and of RA of the hand

Management

- Explain the principles of management including analgesia, DMARDS and referral if appropriate.
- Explain the principles of management including pain relief, drugs, physiotherapy, occupational therapy, rehabilitation and surgery.

**CONDITIONS**

- BURSITIS
- SOFT TISSUE INJURY
- CRYSTAL ARTHROPATHY
- SEPTIC ARTHRITIS
- COMPLICATIONS OF FRACTURES (INCLUDING COMPARTMENT SYNDROME, NON-UNION, MALUNION, AVASCULAR NECROSIS)
- FRACTURE(S) INCLUDING PATHOLOGICAL FRACTURES
- OSTEOARTHRITIS
- RHEUMATOID ARTHRITIS
- OSTEOMYELITIS
- SYSTEMIC LUPUS ERYTHEMATOSUS

# Women's Health: Gynaecology

## 17. Abnormal smear result

By the end of the block students should be able to:

History

- Take a history from a patient with abnormal cervical smear result

Examination

- Understand how examination of the cervix is done

Differential diagnoses

- Describe the role of Human Papilloma Virus (HPV) in the development of abnormal cervical pathology and high-risk HPV (HPV16 and HPV18) link to cervical cancer

Investigations

- Describe the current cervical screening programme, the age group and frequency of screening. Understand the use of liquid-based cytology and the principles of colposcopy

Management

- Understand the role of HPV vaccination in protecting against high-risk HPV and the age group recommended for vaccination (12 -18 years)
- Understand the principles of referral to colposcopy.

**CONDITIONS**

- CERVICAL SCREENING (HUMAN PAPILLOMA VIRUS)
- HUMAN PAPILLOMA VIRUS INFECTION

## 18. Amenorrhea, dysmenorrhea and abnormal vaginal bleeding

By the end of the block students should be able to:

History

- Take a history of the onset of symptoms, duration and progression including pain, heaviness of bleeding, IMB, PCB, pattern of cycle, effect on social / occupational life.

Examination

- Perform an appropriate abdominal and pelvic examination for menstrual problems.

Differential diagnoses

- Describe appropriate differential diagnoses including amenorrhoea, menorrhagia, metrorrhagia, dysfunctional uterine bleeding, menopause and postmenopausal bleeding.
- Explain the physiology of normal menstruation and common causes of abnormal menstruation

Investigations

- Describe bedside, clinical, laboratory and radiological investigations to investigate a patient with abnormal menstruation including pelvic USS, endometrial biopsy, hormonal profile – TFTs, prolactin, FSH/LH

Management

- Explain the principles of management of common causes and the concerns which a patient might have.

**CONDITIONS**

- FIBROIDS
- ENDOMETRIOSIS
- ENDOMETRIAL CANCER
- OVARIAN CANCER
- HYPOTHYROIDISM
- GENITOURINARY SYMPTOMS OF MENOPAUSE

## 19. Contraception request / advice

By the end of the block students should be able to:

History

- Identify key features in the history that would be important for consideration in the choice of contraception including social aspects and risk factors for thrombosis and cancers

Examination

- Describe examination findings which may support contraceptive choice

Differential diagnoses

- Outline the merits and disadvantages of the variety of contraceptive methods available to patients including natural methods, barrier (male/female condom, diaphragm, caps), hormonal (combined and progesterone-only via oral, transdermal, subdermal, intramuscular routes), intrauterine contraception (copper or progestogen), sterilisation (male/female), post-coital emergency methods (progestogen, intrauterine contraceptive device).

Investigations

- Describe appropriate tests to investigate potential side effects of contraceptives (such as thrombosis, hypertension, etc.)

Management

- Demonstrate a basic knowledge of reversible, irreversible and post-coital emergency contraception including the various methods, their mode of action, efficacy, contraindications and complications.
- Understand the methods by which contraception can be achieved: gamete suppression, modulation of the cervical mucus, endometrial changes, prevention of implantation, and interruption of the communicating tubes.
- Explain why contraception is important on a national and global scale and the need to respect cultural and religious beliefs as well as sexual diversity.

**CONDITIONS**

- DEEP VEIN THROMBOSIS
- HYPERTENSION (ESSENTIAL OR SECONDARY)
- TERMINATION OF PREGNANCY
- POLYCYSTIC OVARY SYNDROME (PCOS)

## 20. Urethral discharge and genital ulcer/warts

By the end of the block students should be able to:

History

- Describe key features of the history (including genito-urinary / sexual history) and findings from the examination which help differentiate between causes

Examination

- Undertake genital examination with sensitivity and dignity to patients

Differential diagnoses

- Describe common and important causes of urethral discharge (chlamydia, gonorrhoea, candida), genital warts (HPV) and genital ulcers (herpes, syphilis, reactive arthritis).

Investigations

- Describe relevant investigations in a patient with urethral discharge and ulcers

Management

- Explain the principles of management of patients with urethral discharge or ulcer/warts including contact tracing and ways of limiting the spread of infection

**CONDITIONS**

- CHLAMYDIA
- GONORRHOEA
- CANDIDASIS
- HERPES SIMPLEX VIRUS
- HUMAN PAPILLOMA VIRUS
- SYPHILIS

## 21. Vaginal discharge

By the end of the block students should be able to:

History

- Describe key features of the history (including genito-urinary / sexual history) and findings from the examination which help differentiate between causes

Examination

- Undertake genital examination with sensitivity and dignity to patients

Differential diagnoses

- Describe common and important causes of vaginal discharge (chlamydia, gonorrhoea, candida, bacterial vaginosis, trichomonas vaginalis, pelvic inflammatory disease).

Investigations

- Describe relevant investigations in a patient with vaginal discharge.

Management

- Explain the principles of management of patients with vaginal discharge including contact tracing and ways of limiting the spread of infection

**CONDITIONS**

- CHLAMYDIA
- GONORRHOEA
- CANDIDASIS
- BACTERIAL VAGINOSIS
- TRICHOMONAS VAGINALIS
- PELVIC INFLAMMATORY DISEASE

# Women's health: Obstetrics

## 22. Infant feeding problems

By the end of the block students should be able to:

History

- Take a history during puerperium and understand the definition of puerperium as the time from the delivery of the placenta to the end of the 6$^{th}$ postnatal week.
- Take a breastfeeding history and explore difficulties in establishing breastfeeding

Examination

- Carry out relevant examination (general, breast, abdominal, pelvic) during the puerperium.

Differential diagnoses

- Describe the physiological changes during the puerperium including breast changes and lactation.

Investigations

- Describe bedside, laboratory and imaging tests which may be appropriate whilst breastfeeding.

Management

- Explain the importance of breastfeeding / awareness of breastfeeding initiatives difficulty establishing breastfeeding and common breast problems such as nipple pain, nipple cracking, breast engorgement, mastitis.
- Be able to advise on postpartum contraception.

**CONDITIONS**

- BREAST ABSCESS / MASTITIS
- DEPRESSION

## 23. Labour

By the end of the block students should be able to:

History
- Take a good history of the key features of labour including characterisation of pain and other symptoms.

Examination
- Demonstrate the key features in the examination of the pregnant abdomen, pelvis and perineum including episiotomy cuts.

Differential diagnoses
- Describe the various stages of normal labour including anatomy of the pelvis and mechanism of normal labour. Know about pain relief in labour, preterm labour and premature rupture of membranes as well as complications in labour.

Investigations
- Describe the clinical and laboratory investigations that would be appropriate to investigate a patient in labour.

Management
- Explain maternal and foetal wellbeing monitoring including use of the partogram and awareness of multi-professional working.
- Fully participate, assist, or conduct a normal vaginal delivery under supervision.
- Outline the principles for the choice of mode of delivery by the mother in partnership with healthcare professionals and the legal status of the foetus and the mother.
- Explain the various types of pain relief in labour, their use, limitations and / or side effects

**CONDITIONS**
- PLACENTA PRAEVIA
- PLACENTAL ABRUPTION
- SEPSIS (INCLUDING NEURTROPENIC SEPSIS)
- POSTPARTUM HAEMORRHAGE
- COMPLICATIONS OF LABOUR (INCLUDING MALPRESENTATION, SHOULDER-DYSTOCIA, PRETERM LABOUR, CORD PROLAPSE)

## 24. Normal pregnancy and antenatal care

By the end of the block students should be able to:

History
- Take an obstetric history including past obstetric history and mode of delivery.
- Take an appropriate history of pregnancy risk factors.

Examination
- Examine the pregnant abdomen and auscultate the foetal heart beat.

Differential diagnoses
- Describe the physiological changes that happen during pregnancy including homeostatic changes, prothrombotic changes (coagulation factors, Protein C, S, etc).
- Describe the changes in body systems / organs that accompany pregnancy including cardiovascular, renal, GI and immune systems. Understand placental pathology such as placenta praevia and vasa praevia.

Investigations
- Describe relevant investigations including health checks during pregnancy, ultrasound, and CTG

Management
- Explain the hormonal changes during pregnancy, sources of the hormones, their effects and the developmental processes including the feto-placental unit.
- Explain the principles of management of common conditions during pregnancy including hypertension and diabetes mellitis.
- Describe routine vaccination in pregnancy (e.g. influenza vaccine, combined diphtheria/tetanus/polio/pertussis vaccine) and when additional vaccination is required e.g. Hepatitis B in those at risk

- Outline schedules of routine antenatal care, midwifery care for low-risk women and the use of Anti-D.
- Explain the principles of management of common conditions during pregnancy including hypertension and diabetes mellitus.

**CONDITIONS**

- HYPERTENSION IN PREGNANCY (INCLUDING GESTATIONAL HYPERTENSION, PRE-ECLAMPSIA, ECLAMPSIA
- DIABETES IN PREGNANCY (GESTATIONAL AND PRE-EXISTING)
- OBESITY AND PREGNANCY
- VENOUS THROMBOEMBOLISM (VTE) IN PREGNANCY AND PUERPERIUM.
- HAEMOGLOBINOPATHIES
- BLOOD GROUP INCOMPATIBILITY IN PREGNANCY
- JAUNDICE IN PREGNANCY
- MULTIPLE PREGNANCY

# Phase 2 Day Learning Outcomes

The three Phase 2 days cover the following CCE presentations:

**MSK day**

Acute kidney injury (Medicine)

Electrolyte abnormalities (Medicine)

Musculoskeletal/soft tissue injury/other trauma (Surgery)

Shock (Surgery)

**Gynaecology day**

Abnormal cervical smear result (Specialties)

Contraception request/advice (Specialties)

Vaginal discharge (Specialties)

Menstrual problems (Specialties)

Urethral discharge and genital ulcer/warts (Specialties)

**Men's health day**

Scrotal/testicular pain and/or lump/swelling (Surgery)

Haematuria (Surgery)

Urinary symptoms (Surgery)

Urethral discharge and/or genital ulcers/warts

# Learning Outcomes for GP Days in CCE

## 1. Apply to medical practice biomedical scientific principles, methods and knowledge

By the end of CCE students should be able to:

- Select appropriate forms of management for common diseases, and ways of preventing common diseases, and explain their modes of action and their risks from first principles
- Explain the modes of action and risks of forms of management for common diseases and ways of preventing common diseases including surgical, medical, radiotherapeutic, supportive, palliative, and preventative approaches in terms understandable by users of health services.
- Explain a plan of management in terms understandable by a health service user.
- Select appropriate forms of management relating to typical presentations of common and important conditions bearing in mind clinical data and patient perspective.
- Demonstrate how to implement appropriate risk reduction strategies for common diseases in individual patients.
- Make accurate observations of clinical phenomena and appropriate critical analysis of clinical data
- Demonstrate reaching relevant and useful conclusions about a patient's general health and progress during common illnesses or treatment using routine clinical data in real or simulated patients
- Summarise clinical observations for real and simulated patient cases
- Synthesise the results of history taking and examination together with results of tests to generate a working diagnosis and request further tests if needed.
- Accurately present the results of history taking and examination in a succinct but comprehensive way including, when necessary, the ability to prioritise the most clinically relevant data.
- Carry out a competent history and examination of a real or simulated patient including the accurate observation and recording of signs and symptoms.

## 2. Apply psychological principles, methods, and knowledge to medical practice

By the end of CCE students should be able to:

- Discuss psychological concepts of health, illness, and disease
- Formulate and manage the psychological components of a bio-psycho-social formulation for any individual patient's physical or mental illness
- Relate how psychological factors affect the prognosis in long-term physical illness, stress, and depression in real or simulated patient cases.

## 3. Apply social science principles, methods, and knowledge to medical practice

By the end of CCE students should be able to:

- Recognise the diversity of patient experiences (social and emotional aspects) and behaviour in relation to living with common health conditions
- Discuss sociological concepts of health, illness, and disease
- Use knowledge of individual patients lay beliefs in management the planning
- Discuss lay beliefs with patients
- Elicit and distinguish lay beliefs when talking to simulated or real patients.
- Recognise the importance of listening to and understanding patients' lay beliefs/knowledge and the shift towards the patient as 'expert'

- Recognise how doctor-patient relationships are affected by social forces and change over time.
- Identify the importance of patients' perspectives on illness and disability and the relevance of this to clinical practice

## 4. Carry out a consultation with a patient

By the end of CCE students should be able to:

- Take and record a patient's medical history, including family and social history, talking to relatives or other carers where appropriate
- Demonstrate the skills of a person-centred interview in an active clinical environment
- Practice history taking involving a third party in a controlled clinical environment
- Observe and review triadic consultations in routine clinical practice
- Elicit patient's questions, their understanding of their condition and treatment options, and their views, concerns, values, and preferences
- Demonstrate the skills of seeking questions and checking patient understanding in an active clinical environment and in controlled clinical teaching environment
- Demonstrate a structured approach to examining patients in simulated and real clinical environments
- Apply appropriate strategies to complete necessary examination in those with sensory or mobility problems and in those who have impaired understanding
- Demonstrate ability to communicate appropriately with patient while performing a physical examination; to explain what is going to be done; reassure during performance; continual observance of patient's non-verbal and verbal cues during examination
- Demonstrate a structured approach to examining the child including observation, palpation, and auscultation
- Provide explanation, advice, reassurance, and support
- Demonstrate skills in providing explanation in language and at a pace appropriate to patient; checking understanding; awareness of importance of follow-up plan and provision of contact details for appropriate support

## 5. Diagnose and manage clinical presentations

By the end of CCE students should be able to:

- Interpret findings from the history, physical examination, and mental-state examination, appreciating the importance of clinical, psychological, spiritual, religious, social and cultural factors
- Make an initial assessment of a patient's problems and differential diagnosis. Understand the processes by which doctors make and test differential diagnosis
- Present a series of clinical cases that demonstrate an integrated and efficient process for making an initial assessment of a patient's presentation
- Outline the hypothetico-deductive and pattern recognition methods of arriving at the likely clinical diagnoses with a consideration of important differential diagnoses with a particular emphasis on not missing potentially serious or life-threatening conditions
- Synthesise a full assessment of the patient's problems and define the likely diagnosis
- Present a comprehensive assessment of a patient's clinical problem in real clinical scenarios having obtained a full clinical history and performed a relevant detailed clinical examination including the likely clinical diagnoses and important differential diagnoses
- Make clinical judgements and decisions, based on the available evidence, in conjunction with your supervisor and as appropriate for your level of training and experience. This may include situations of uncertainty
- Support patients in caring for themselves

- Demonstrate that a treatment plan has been explained to a patient with special emphasis on self-management. This would be to manage current conditions and prevent future long-term conditions and other co-morbidities where an evidence base exists.

## 6. Communicate effectively with patients & colleagues in a medical context

By the end of CCE students should be able to:

- Communicate clearly, sensitively, and effectively with patients, their relatives or other carers, and colleagues from the medical and other professions, by listening, sharing and responding.
- Demonstrate the skills needed to conduct a triadic consultation e.g., with carers etc.
- Communicate appropriately in difficult circumstances, such as when breaking bad news, and when discussing sensitive issues, such as alcohol consumption, smoking or obesity.
- Demonstrate with a simulated patient or in a clinical setting a lifestyle/behaviour change/health promotion intervention
- Assess the impact of alcohol and drug consumption using appropriate frameworks such as CAGE and FRAMES.

## 7. Prescribe drugs safely, effectively, and economically

By the end of CCE students should be able to:

- Provide patients with appropriate information about their medicines.
- Demonstrate informing real or simulated patients about how to take their medicines including the use of common delivery devices such as inhalers
- Discuss the benefits and risks of drug therapy with patients with real or simulated patients
- Reach a shared decision with a real or simulated patient about his or her treatment considering clinical information, best evidence, and the wishes, values and preferences of the patient.
- Identify measures to improve poor adherence whether intentional or unintentional
- Make an accurate assessment of adherence to medication as part of a medical history

## 8. Use information effectively in a medical context

By the end of CCE students should be able to:

- Specify the data required for a specified research purpose and show how to collect, analyse, interpret, and present it for a range of purposes including audit and service development.

## 9. Reflect, learn, and teach others

By the end of CCE students should be able to:

- Continually and systematically reflect on practice and, whenever necessary, translate that reflection into action, using improvement techniques and audit appropriately, for example, by critically appraising the prescribing of others
- Complete an appropriate element of a clinical audit

## 10. Learn and work effectively within a multi-professional team

By the end of CCE students should be able to:

- Understand and respect the roles and expertise of health and social care professionals in the context of working and learning as a multi-professional team

- Describe the basic roles of key health and social care professionals involved in a person's care in primary care and community settings (HV, DN, GP, practice nurse, social care worker).

## 11. Protect patients and improve care

By the end of CCE students should be able to:

- Understand and have experience of the principles and methods of improvement, including audit, adverse incident reporting and quality improvement, and how to use the results of audit to improve practice.
- Understand the use of the audit as a tool to monitor/improve performance in compliance with local and national guidelines
- Develop a worked example of audit including recommendations for change in practice
- Describe common approaches used in clinical practice to assure and improve quality - including audit and adverse incident reporting
- Evaluate the success of an audit scenario
- Complete an appropriate element of a clinical audit

# Learning Outcomes for Phase 2 Community Learning – 2026-27

Students should apply the following learning outcomes should be applied to each of their three community days:

- Palliative care in community
- Third sector services in community
- Promoting health in underserved communities

1. Act with integrity, be polite, considerate, trustworthy and honest (2e) and take personal and professional responsibility for actions (2f)
2. Maintain confidentiality and respect patients' and service users' dignity and privacy (2d)
3. Communicate clearly, sensitively and effectively (10a)
4. Recognise the potential impact of attitudes, values, beliefs, perceptions and personal biases on individuals and groups, and identify personal strategies to address this (2j)
5. Describe and show respect for the roles of health and social care professionals working in community settings, and be able to identify the contribution they make to the wellbeing of patients or service users (9c)
6. Review services that are available to support individuals in community settings
7. Identify the patient or service user's views and priorities (2k)
8. Describe any psychological (23d) and social impacts (24d) on the patient or service user, family or significant others
9. Work effectively with peers to prepare for and contribute to a professional discussion around patient care (9b)
10. Evaluate the clinical complexities, uncertainties and emotional challenges involved in managing patients in community settings (6g)