

## 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.

<p><b>Cardiovascular</b></p> <ol style="list-style-type: none"> <li>1. Breathlessness (cardiac)</li> <li>2. Chest pain</li> <li>3. Heart murmurs</li> <li>4. Hypertension</li> <li>5. Painful swollen leg</li> <li>6. Palpitations</li> <li>7. Peripheral oedema and ankle swelling</li> </ol> <p><b>Endocrine</b></p> <ol style="list-style-type: none"> <li>8. Abnormal blood sugar / Polydipsia</li> <li>9. Fatigue</li> <li>10. Weight gain (Obesity) / Weight loss</li> </ol> <p><b>General medicine / Metabolic</b></p> <ol style="list-style-type: none"> <li>11. Acid-base abnormalities</li> <li>12. Allergy / Anaphylaxis</li> <li>13. Deteriorating patient / Sepsis</li> <li>14. Fever</li> </ol>	<p><b>Neurological</b></p> <ol style="list-style-type: none"> <li>15. Dizziness</li> <li>16. Headache</li> <li>17. Seizures</li> <li>18. Stroke</li> </ol> <p><b>Renal and urinary</b></p> <ol style="list-style-type: none"> <li>19. Acute Kidney Injury &amp; Renal failure</li> <li>20. Chronic Renal Failure &amp; Proteinuria</li> <li>21. Fluid and electrolyte abnormalities</li> </ol> <p><b>Respiratory</b></p> <ol style="list-style-type: none"> <li>22. Acute upper respiratory symptoms /sore throat</li> <li>23. Breathlessness (non-cardiac)</li> <li>24. Cough (+/- wheeze)</li> <li>25. Haemoptysis</li> <li>26. Pain on inspiration</li> </ol>
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The key learning outcomes are:

- To take an adequate history and understand relevant differentials
- Carry out necessary examinations and investigations
- To understand initial management plans for such conditions

# Cardiovascular

## 1. Breathlessness (cardiac)

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

### History

- Take a history of a patient with breathlessness (cardiac related) including onset / duration of symptoms, chest pain, orthopnoea, PND, and risk factors.

### Examination

- Demonstrate key features of a cardiovascular examination and abnormal findings which may be seen such as 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, constrictive pericarditis and pericardial effusion). Understand the underlying pathophysiology of breathlessness

### Investigations

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

### Management

- Describe initial management including for heart failure, cardiac arrhythmia, fluid overload, and other common causes.

## 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 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.

### 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. Also 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 rheumatic heart disease, infective endocarditis, myocardial infarction with rupture of papillary muscles, valve prolapse, 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.

### 4. Hypertension

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, 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.

## 5. Painful swollen leg

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.

### 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, cellulitis, thrombophlebitis, compartment syndrome, 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.

## 6. 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<sub>2</sub> 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.

## 7. 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.

## Endocrine

### 8. Abnormal blood sugar (including polydipsia)

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

#### History

- Describe key findings in the history which may indicate abnormal blood sugar such as polyuria, polydipsia, symptoms of hyperglycaemia and hypoglycaemia, as well as features assessing diabetic control, compliance and complications.

#### Examination

- Do a general examination including findings which may indicate abnormal blood sugar (hyperglycaemia and hypoglycaemia) and diabetic complications including low GCS, confusion, abnormal neurological examination and diabetic foot signs.

#### Differential diagnoses

- Describe differential diagnoses for symptoms such as diabetes insipidus, neurological conditions, endocrine conditions, iatrogenic causes and intoxication.

#### Investigations

- Describe investigations for abnormal blood sugar including blood glucose monitoring, glycosylated haemoglobin and follow up monitoring for diabetics.

#### Management

- Carry out initial management of hypoglycaemia including oral/IV glucose and consider diet, lifestyle advice, oral medications or insulin for acute/chronic hyperglycaemia.

### 9. 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). 2) Medication-induced fatigue (beta-blockers, benzodiazepines, corticosteroids) 3) Haematological causes (anaemia, lymphoma); 4) Endocrine causes (DM, hypothyroidism, adrenal insufficiency, vitamin deficiency); 5) Infection (TB, HIV, infectious mononucleosis); 6) Sleep apnoea, CCF, 7) Malignancy 8) Short-term causes including transient infections and difficult life circumstances

### 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

## 10. Weight gain/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 weight gain (hypertension, hyperlipidaemia, NIDDM, gallbladder disease, sleep apnoea, reduced life expectancy, oesophageal and renal cancer)
- 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 Cushing's or thyroid abnormalities.

### Differential diagnoses

- Identify important causes of weight gain including excess calorie intake, inadequate exercise, diseases such as hypothyroidism and Cushing's syndrome and drugs which may cause weight gain (anticonvulsants, antidepressants, antipsychotics, oral corticosteroids).
- Regarding weight loss, consider nutritional deficiency, eating disorders, low mood, IBD, hyperthyroidism, coeliac disease 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.

## General Medicine / Metabolic issues

## 11. Acid-base abnormalities

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

### History

- Take a history of symptoms including vomiting, diarrhoea, increasing confusion, breathing problems as well as medication history and past medical history.

### Examination

- Carry out an examination eliciting key clinical signs which may help develop appropriate differential diagnoses for acidosis and alkalosis

### Differential diagnoses

- Describe the causes of respiratory alkalosis / acidosis and causes of metabolic alkalosis / acidosis along with an understanding of the homeostatic control of pH.

### Investigations

- Describe bedside, clinical, laboratory and radiological investigations to investigate a patient with acid-base abnormalities including U& Es, ABG, pH and interpretation.

### Management

- Describe the initial management of patients with specific acid base imbalances.

## **12. Allergies / Anaphylaxis**

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.
- 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.

## **13. Deteriorating patient / Sepsis**

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)

### Differential diagnoses

- Identify important differential diagnoses including sepsis of chest, urinary or abdominal origin and sepsis of unknown origin.

### 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.

## 14. 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<sub>2</sub> 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 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.

## Neurology

## 15. 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, 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 medications, lifestyle advice and safety netting.



## 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, trigeminal neuralgia, GCA, 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.

## 17. Fits and 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, 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.

## 18. Stroke

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

### History

- Take a history of anterior and posterior stroke symptoms, including risk factors such as hypertension, diabetes, smoking, hypercholesterolaemia, carotid stenosis and TIA.

### Examination

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

### Differential diagnoses

- Identify important differential diagnoses including delirium, syncope, space occupying lesion and demyelination. 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, carotid USS and swallow investigation.

#### Management

- Understand management principles including thrombolysis medication like alteplase, antiplatelet drugs such as aspirin, and specialist care on stroke units.

## Renal and Urinary

### 19. Acute Kidney Injury / Renal failure

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), renal (glomerulonephritis, diabetes, infection, drugs – chemotherapy / antibiotics, medication nephropathy) or post-renal (obstruction).

#### 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.

### 20. Chronic Kidney Disease / Proteinuria

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), 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.

## **21. Fluid and 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, drugs (anticonvulsants, antidepressants, psychotropics).
- Identify common presentations of hypo and hypercalcaemia and understand what may cause these.

#### 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.

## **Respiratory**

## **22. Acute upper respiratory symptoms / 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 and bacterial infections 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).

### **23. Breathlessness (non-cardiac)**

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

#### History

- Take a history of a patient with breathlessness (non-cardiac cause) including characterisation of symptoms, risk factors, smoking history and past medical history.

#### Examination

- Carry out a general examination (reduced oxygen saturations, cyanosis), and a respiratory examination eliciting abnormal findings which may be present, including wheeze and crepitations.

#### Differential diagnoses

- Describe important differential diagnoses for non-cardiac causes of acute breathlessness (including epiglottitis, acute bronchitis, acute asthmatic attack, pneumonia, ARDS, pneumothorax, PE) and chronic breathlessness (asthma, COPD, pleural effusion, bronchiectasis, lung cancer, interstitial lung disease and cystic fibrosis).

#### Investigations

- Describe the investigations for breathlessness of non-cardiac origin including ABG, FBC, CXR, PEFr, lung function test, ECG, 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.

### **24. Cough (+/- wheeze)**

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 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.

## 25. 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, 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.

## 26. 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 and pleurisy.

### Investigations

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

### Management

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