



1. A 65-year-old man presents to the GP with a 4-week history of exertional chest pain and dyspnoea. He describes the pain as central chest tightness which is relieved by rest. His past medical history includes hypertension, COPD, and stage 3 CKD. Which of the following investigations would confirm the diagnosis?
 - a. ECG
 - b. Troponin T levels
 - c. Stress ECG
 - d. Chest X-Ray
 - e. Echocardiogram

2. A 55-year-old woman presents to the GP complaining of recurrent syncope, light-headedness, and chest pain on exertion. A cardiac examination is performed, and the GP identifies an ejection systolic murmur heard loudest over the right 2nd intercostal space. It can also be heard over the carotid arteries. Which of the following is the most likely diagnosis?
 - a. Aortic regurgitation
 - b. Prinzmetal's angina
 - c. Mitral stenosis
 - d. Aortic stenosis
 - e. Mitral regurgitation

3. A 21-year-old woman presents to the GP complaining of weight gain, fatigue, constipation, and infrequent periods. She also feels low all the time. On examination, her heart rate is 55bpm and she has dry, flaky skin. Which of the following treatment options is most likely to relieve her symptoms?
 - a. Carbimazole
 - b. Carbamazepine
 - c. Levothyroxine
 - d. Propylthiouracil
 - e. Metformin

4. A 32-year-old man presents to A&E with severe epigastric pain. The pain radiates to his back and is slightly improved with leaning forward. Abdominal examination reveals guarding, and he is found to be pyrexial and jaundiced. He is prescribed analgesia, and you are able to take a history from him. He tells you he has been drinking 1 bottle of wine a day for the past week. From this man's presentation, what is the most likely diagnosis?
 - a. Gastro-oesophageal reflux disease
 - b. Pericarditis
 - c. Intestinal obstruction
 - d. Pancreatitis
 - e. Renal colic

5. A 45-year-old man presents to his GP with jaundice. He says he is not in any pain, but he has noticed dark urine and pale stools. He is pleased that he has lost 8kg of weight in the past month, but says he has difficulty



sleeping due to night sweats. On examination, the man is found to be severely jaundiced and cachexic, and his gallbladder is easily palpable. Which of the following is the most likely diagnosis?

- a. Reflux disease
 - b. Gallstones
 - c. Pancreatic cancer
 - d. Non-alcoholic fatty liver disease
 - e. Coeliac disease
6. A 25-year-old woman presents to her GP complaining of severe right sided facial pain. The pain is sharp, electric-shock-like, and shoots down her jaw. It is brought on when she talks, eats, or touches her face, and lasts for a few seconds. However, the woman says that the pain is so bad that she is afraid to eat or talk. Which of the following medications is the first-line treatment for this condition?
- a. Carbimazole
 - b. Gabapentin
 - c. Carbamazepine
 - d. Carbidopa
 - e. Ergometrine
7. A 22-year-old woman presents to her GP complaining of joint swelling and stiffness, mainly affecting her hands and knees in the same places on each side. She says that the pain and stiffness are much worse in the mornings, lasting for over an hour. She has also noticed some lumps along both her arms, and down to her elbows. Based on her presentation, which of the following medications is the first-line treatment for her condition?
- a. Methotrexate
 - b. Colchicine
 - c. Morphine
 - d. Gabapentin
 - e. Infliximab
8. A 36-year-old woman presents to the GP with a 5-week history of cough, haemoptysis and chest pain. She mentions that her friends have congratulated her on weight loss, though it was unintentional. She also complains of feeling tired and having to wake up at night to change her sheets due to night-sweats. She tells you she has recently returned from a trip to Southern Asia. Which of the following treatments is likely to interact with her oral contraceptive pill?
- a. Pyrazinamide
 - b. Isoniazid
 - c. Rifampicin
 - d. Ethambutol
 - e. Streptomycin



9. A 19-year-old university student presents to A&E with fever, a headache, neck stiffness, photophobia, and nausea. As part of examining the patient, the doctor flexes the patient's neck, which causes his hips and knees to flex. What is this sign called?
- Kernig's sign
 - Lhermitte's sign
 - Brudzinski's sign
 - Uhthoff's phenomenon
 - Romberg's sign
10. A 65-year-old man presents to A&E after suddenly losing vision in his right eye. He describes the loss of vision as "a curtain coming down". He mentions that he has continuous headaches, and that his scalp hurts him when he combs his hair in the mornings. On examination, his right temporal artery is tender, and visibly pulsating. What is the best immediate course of treatment?
- Infliximab
 - Prednisolone
 - Methotrexate
 - Azathioprine
 - Morphine
11. A 23-year-old woman presents to her General Practitioner with a 4-week history of bloody diarrhoea. She mentions that she has crampy abdominal pain, and that her symptoms are stopping her from carrying out her daily activities, and that she feels tired all the time. Which histological finding would differentiate between a diagnosis of Crohn's disease and a diagnosis of Ulcerative Colitis?
- Owl's eye intranuclear inclusions
 - Transmural inflammation
 - Crypt abscesses
 - Pseudopolyps
 - Absence of skip lesions
12. A 51-year-old man presents to A&E with severe pain in his right hallux. The pain came on suddenly and woke him up from sleep. On examination, the first MTP joint is swollen, tender, and warm. The night before, he had consumed large amounts of seafood and beer. As part of the management, a joint aspirate is performed, and the patient is prescribed ibuprofen for his pain. Which finding of the joint aspirate under polarised light would be most consistent with this patient's symptoms?
- Needle shaped positively birefringent crystals
 - Needle shaped negatively birefringent crystals
 - Rhomboid shaped positively birefringent crystals
 - Rhomboid shaped negatively birefringent crystals
 - Biconcave shaped negatively birefringent crystals



13. A 42-year-old man presents to A&E with sudden onset dyspnoea and haemoptysis. He had recently been immobilised for 6 weeks, with his lower left leg in a plaster cast following a road traffic accident. On examination, his left calf is swollen and tender with pain radiating along the deep veins. Which investigation should be carried out to confirm the diagnosis of Pulmonary Embolism?
- Chest X-Ray
 - ECG
 - CT Pulmonary Angiogram
 - D-Dimer
 - Doppler ultrasound
14. A 70-year-old man attends a routine check-up with his General Practitioner. He mentions that he has problems with his waterworks and that he often must strain to start urinating. He tells the GP that he now wakes up 3 times to go to the toilet, and that his quality of sleep is reduced. He is also embarrassed by the fact that he dribbles urine even after he has finished urinating. He denies any haematuria, and his past medical history is unremarkable. A prostate exam is performed, and the doctor notes that his prostate is enlarged and feels smooth. What would be the first line treatment for this patient?
- Finasteride
 - Tamsulosin
 - Transurethral resection of prostate
 - Bladder drill
 - Retropubic prostatectomy
15. An 18-year-old student has recently returned from a gap year in sub-Saharan Africa. Overnight, she developed a fever, and was sweating, and now, 36 hours later, she feels cold and shivery. She also has diarrhoea and muscle pain. She is suspected to have malaria. Which investigation would confirm the diagnosis?
- Blood cultures
 - Urine MC+S
 - Blood film
 - Sputum culture
 - CSF culture
16. A 55-year-old woman presents to A&E with what she describes as the worst headache ever, which suddenly came on 30 minutes ago while watching TV. She feels sick and cannot tolerate bright lights. She also has a stiff neck. At this point in time, which investigation would be most likely to confirm the diagnosis of sub-arachnoid haemorrhage?
- Lumbar puncture
 - CT Head
 - EEG
 - X Ray Head



- e. ECG
17. A 35-year-old man presents to A&E with severe lower back pain on his left side. The pain radiates from "loin to groin", and he tells you that he has severe pain when he urinates. What is the first-line investigation for suspected renal colic in this man?
- Abdominal X-Ray
 - Urinalysis
 - Non-Contrast CT Kidney, Ureters, Bladder
 - Serum Urea + Electrolyte levels
 - Renal ultrasound
18. An 18-year-old woman presents to her GP with a 2-month history of crampy abdominal pain and loose, pale stools that float in the pan and are difficult to flush away. She has not noticed any blood in her stools, but she notes that they smell worse than usual, and that she has been feeling increasingly tired. On examination, she has pale mucous membranes, and angular stomatitis. What is the gold-standard investigation for coeliac disease?
- Abdominal x-ray
 - Barium meal
 - IgA-TTG
 - Small bowel histology
 - ERCP
19. A 45-year-old woman presents to her GP with increased frequency of urination, thirst, and some weight loss. Her HbA1c score is 49. Based on this, what would be the first line treatment for her diabetes mellitus?
- Insulin
 - Sulfonylurea
 - Sulfonylurea + Insulin
 - Metformin
 - Lifestyle changes + Metformin
20. A 55-year-old man presents to the GP with a 4-week history of haematuria. He says that his urine is bright red, but he denies any pain while urinating. He says that he used to go to the toilet twice a day, but now he has to go 4 times, as well as wake up at night to empty his bladder. There is no relevant past medical history, but he tells you that he used to work in a dye factory and that he smokes 10 cigarettes a day. What is the most likely diagnosis in this man's case?
- Urinary tract infection
 - Renal stones
 - Bladder cancer
 - Prostate cancer
 - Prostatitis



21. A 63-year-old ex-miner attends GP with worsening dyspnoea and a non-productive cough. On examination the GP finds clubbing of the fingers and fine crepitations can be heard bilaterally at both lung bases. The crepitations are not cleared by coughing. Which of the following is the most likely diagnosis for this patient?
- COPD
 - Asthma
 - Idiopathic Pulmonary Fibrosis
 - Pulmonary oedema
 - Bronchiectasis
22. A 45-year-old Afro-Caribbean woman attends a regular check-up at her GP. Her blood pressure is found to be 145/90 mmHg. Given her past medical history of asthma, what is the first line medication that should be given to treat her hypertension?
- Propranolol
 - Ramipril
 - Candesartan
 - Amlodipine
 - Furosemide
23. A 19-year-old university student presents to the GP with a lump in his neck that feels rubbery. Although it is painless, he has noticed that the lump aches when he drinks alcohol. He mentions that he wakes up in the middle of the night sweating profusely, and he thinks this is the reason for his fatigue. What is the most likely diagnosis in this case?
- Acute myeloid leukaemia
 - Hodgkin's lymphoma
 - Multiple myeloma
 - Glandular fever
 - Chronic lymphocytic leukaemia
24. A 50-year-old man presents to his GP with a 2-month history of erectile dysfunction. His past medical history includes hypertension and hypercholesterolaemia, and his BMI is 40. He has been in a stable relationship with his wife for 25 years, but this has put a strain on their relationship. What is the first line pharmacological management of erectile dysfunction?
- Intracavernous injections
 - Vacuum devices
 - Penile prosthesis implantation
 - Phosphodiesterase inhibitors
 - Finasteride
25. A 55-year-old man presents to the GP because he noticed he is sweating out of only the left side of his face, and that his left eyelid is drooping. He has noticed a little weight loss, but he mentions that it was unintentional.



He says that he has been increasingly breathless, but he puts this down to age. On examination, his left pupil is constricted. The man's past medical history is unremarkable, but he has smoked 40 cigarettes a day for the past 35 years. What is the most important investigation to carry out at this stage?

- a. Full blood count
- b. Chest X-Ray
- c. CT Thorax
- d. Bronchoscopy with biopsy
- e. PET-CT

26. A 35-year-old woman presents to her GP with a continuous headache. She mentions that her shoe size has increased by 2 sizes, and that her teeth have grown apart, with large gaps between them. Her quality of sleep has also reduced, so that she feels tired throughout the day. She also mentions that she sweats all the time. On examination, the doctor notes prognathism and bitemporal hemianopia. What is the initial screening investigation in this case?

- a. IGF-1 blood test
- b. Chest X Ray
- c. EEG
- d. Serum growth hormone blood test
- e. Dexamethasone suppression test

27. An 18-year-old student presents to A&E with severe abdominal pain. 10 hours ago, she began to experience intermittent periumbilical pain, which has now concentrated to a constant pain in her lower right side. On examination, she is guarding, with rebound tenderness, and Rovsing's sign is positive. With pregnancy ruled out, what is the most definitive treatment for this woman's symptoms?

- a. 14-day course of co-amoxiclav
- b. Appendicectomy
- c. Discharge with analgesia
- d. Cholecystectomy
- e. Triple therapy including omeprazole, amoxicillin, and clarithromycin

28. A 76-year-old man presents to the GP with a 5-week history of loose stools, which have become darker in colour. He has also sometimes noticed some fresh blood mixed in his stools. He reports that he gets some abdominal discomfort after he eats, and that he has been feeling more tired than usual recently. Which of the following is the gold standard investigation for bowel cancer?

- a. Faecal occult blood
- b. Full blood count
- c. Faecal calprotectin
- d. Colonoscopy with biopsy
- e. Digital rectal examination



29. A 64-year-old man presents to his GP with a resting tremor that affects both his hands but is worse on his right. On examination, he has a shuffling gait, cogwheel rigidity, and has slow movements. His wife tells you that his handwriting has gotten smaller, and that his symptoms are greatly affecting his quality of life. Which medication would be most effective in treating his symptoms?
- Levodopa
 - Carbidopa
 - Co-careldopa
 - Domperidone
 - Risperidone
30. A 65-year-old man presents to his GP with lower leg pain that comes on when he walks up hills. The pain used to start after him walking 250 yards, but now starts after 100 yards. The pain is crampy in nature, and he says he cannot walk the dog anymore without having to rest for 10 minutes. He has a past medical history of diabetes, hypertension, and hypercholesterolaemia. What is the most likely pathology that is behind this man's symptoms?
- Atherosclerosis
 - Aortic dissection
 - Diabetic peripheral neuropathy
 - Deep vein thrombosis
 - Guillain barre syndrome
31. A 45-year-old woman presents at A&E with a 1 hour history of severe lower back pain and bladder incontinence. She also has shooting pain down both her legs, as well as saddle numbness. On examination, she has loss of anal tone. What is the most likely diagnosis in this case?
- Motor neurone disease
 - Cauda equina syndrome
 - Guillain barre syndrome
 - Anterior cerebral artery infarct
 - Brown-Sequard syndrome
32. A 21-year-old man presents to A&E with sudden onset right sided chest pain and dyspnoea. There is reduced air entry to the right lung. A chest x-ray is performed, which shows mediastinal shift to the left, as well as right hemidiaphragm depression. What is the most likely pathology behind this man's presentation?
- Right tension pneumothorax
 - Left tension pneumothorax
 - Pulmonary embolism
 - Bronchiectasis
 - Right sided pleural effusion



33. A 36-year-old woman presents to her GP with dysuria, increased frequency, urgency, and cloudy urine. She is not pregnant, but is currently trying for a child, and has no pain in her lower back or sides. Which of the following medications is most suitable?
- Trimethoprim
 - Nitrofurantoin
 - Co-amoxiclav
 - Flucloxacillin
 - Meropenem
34. A 9-year-old girl presents to her GP with a raised rash on the flexor aspects of both her elbows. The rash is itchy, and warm to touch, but is not weeping or crusting over. The girl's past medical history includes asthma and hay fever. What is the first line treatment of eczema?
- Fucidic acid cream
 - Prednisolone PO
 - Tacrolimus cream
 - Hydrocortisone cream
 - Loratadine PO
35. An 88-year-old woman presents with paralysis of the left side of her face. On examination, she cannot wrinkle her left forehead, nor can she blink with her left eye. The A&E doctor also notes a fluid filled rash affecting her left ear. Which vaccine might have prevented this woman's symptoms?
- MMR vaccine
 - Shingles vaccine
 - Haemophilus influenzae vaccine
 - Flu vaccine
 - Rotavirus vaccine
36. A 35-year-old woman presents at GP with a 3-month history of weight loss, loose stools, and heat intolerance. She also mentions that she has a headache. On examination, she has a goitre, a fine tremor, and brisk reflexes. Thyroid function tests are performed, and the doctor uses these to diagnose secondary hyperthyroidism. Which of the following results point to this diagnosis?
- Normal range TSH 0.4 – 4.0 mU/L; T4 9.0 – 22 pmol/l
- TSH <0.02mU/L; T4 26.2pmol/L
 - TSH 0.08mU/L; T4 17.1pmol/L
 - TSH 5.4mU/L; T4 16.4pmol/L
 - TSH 14mU/L; T4 32pmol/L
 - TSH <0.02mU/L; T4 14.4pmol/L
37. A 65-year-old man presents to A&E with a sudden onset left-sided arm weakness, facial droop, and slurring of speech. The symptoms began 1 hour



ago. A CT scan of the head is done, revealing a right Middle Cerebral Artery infarct. What is the immediate management of this man's symptoms?

- a. Nimodipine
- b. Rehabilitation with physiotherapy
- c. Clopidogrel
- d. Alteplase
- e. Referral to neurosurgeons

38. A 15-year-old boy with worsening breathlessness attends GP. His symptoms started 6 months ago and have been worsening since. He also has a dry cough which is worse at night. He is referred for spirometry and his results are recorded before and after the administration of 400 mcg of salbutamol.

	Before salbutamol	After salbutamol
FEV1 (predicted 4.10L)	3.08L	3.99L
FVC (predicted 4.78L)	4.45L	4.70L

Which of the following conditions is most likely?

- a. COPD
- b. Asthma
- c. Emphysema
- d. Bronchiectasis
- e. Cystic fibrosis

39. A 65-year-old man attends GP complaining of leg swelling, especially at the end of the day. On examination, his legs are swollen from the feet up to the knees, with pitting oedema. He also complains of breathlessness, worse on lying down, and a cough productive of pink frothy sputum. His NT-proBNP levels are found to be 1600. Which condition is most likely to be causing this man's symptoms?

- a. Pericarditis
- b. Intermittent claudication
- c. Heart failure
- d. Pulmonary fibrosis
- e. Bronchiectasis

40. A 21-year-old man presents to his GP with a 3-month history of lower back pain that is worse in the morning and improves with exercise. The pain has woken him up from sleep multiple times in the past month. He also has pain in his left buttock. His past medical history includes Crohn's disease and enthesitis. An MRI of his back shows sacroiliitis. Which diagnosis is most likely?

- a. Psoriatic arthritis
- b. Rheumatoid arthritis
- c. Ankylosing spondylitis
- d. Juvenile idiopathic arthritis
- e. Osteoarthritis



41. A 42-year-old woman presents at A&E with sudden onset epigastric pain concentrated on her right side, accompanied by jaundice. Her temperature is 38.3°C. Her LFTs are abnormal. What is the most likely cause of her symptoms?

- a. Primary biliary sclerosis
- b. Hepatocellular carcinoma
- c. Cholecystitis
- d. Ascending cholangitis
- e. Biliary colic

42. A 22-year-old woman presents to her GP with a 1-week history of knee stiffness, red eyes, and problems with micturition. She mentions that she had diarrhoea 2 weeks ago. Which organism is most likely to have caused her diarrhoea, and subsequent reactive arthritis?

- a. Salmonella
- b. E. Coli
- c. Norovirus
- d. C. Difficile
- e. S. Aureus

43. A 9-year-old girl presents to A&E with a 2-day history of tachypnoea and vomiting. She is lethargic. Her mother tells you she has lost 5kg of weight in the past month. An ABG is performed and the results are as follows:

PaO₂: 12 kPa (11 – 13 kPa)
pH: 7.28 (7.35 – 7.45)
PaCO₂: 3.8 kPa (4.7 – 6.0 kPa)
HCO₃⁻: 18 (22 – 26 mEq/L)
BE: -3 (-2 to +2)

Her blood sugar levels are found to be 21mmol/L (4-9mmol/L).

Based on her clinical symptoms and her blood results, what is this girl likely to be suffering from?

- a. Hyperthyroidism
- b. Addison's disease
- c. Diabetic ketoacidosis
- d. Heart failure
- e. Asthma attack

44. A 35-year-old woman with a 21-year history of severe asthma presents to her GP with truncal weight gain, abdominal striae, and low mood. The doctor suspects Cushing's syndrome. Which investigations is indicated in this case?



- a. SynACTHen test
 - b. Oral glucose tolerance test
 - c. Overnight dexamethasone suppression test
 - d. IGF-1 blood test
 - e. Glucagon test
45. A 35-year-old woman goes to A&E with a 1-day history of left eye pain that is made worse with eye movement. Her vision is blurry, and she can no longer see the colour red. On examination, she has nystagmus and diplopia. This has never happened before, but last year she had an episode of right leg weakness that lasted for a week. What is the most likely diagnosis in this woman's case?
- a. Brown-Sequard syndrome
 - b. Guillain barre syndrome
 - c. Myasthenia gravis
 - d. Cerebellitis
 - e. Multiple Sclerosis
46. A 51-year-old man presents to his GP with scrotal swelling. Only one of his testes is affected, and he says it feels like a bag of worms. He also has had haematuria for the past few weeks. The GP suspects renal cell carcinoma. Blockage of which blood vessel has caused this man's varicocele?
- a. Right renal vein
 - b. Left renal vein
 - c. Inferior vena cava
 - d. Inferior phrenic arteries
 - e. Inferior segmental artery
47. A 56-year-old man presents to A&E with retrosternal heartburn that comes on after he eats a fatty meal or drinks coffee. He has had this for years now and is used to using Gaviscon to relieve the pain. He says this is not as effective as it used to be. The GP suspects he may have developed Barrett's oesophagus due to his long history of GORD. Which change on histology of his oesophagus would support this diagnosis?
- a. Stratified squamous to stratified columnar
 - b. Stratified columnar to stratified squamous
 - c. Stratified squamous to simple columnar
 - d. Pseudostratified columnar to stratified squamous
 - e. Stratified squamous to ciliated squamous
48. A 66-year-old woman presents to A&E with an irregularly irregular heart rate. Her ECG shows absent P waves, and a finely oscillating baseline. Her past medical history includes diabetes. After being treated, she is discharged with a follow-up at her GP in a week. Her GP notes that her CHADS₂VASC score is 3. Based on this score, what medication should her GP prescribe?



- a. Warfarin
- b. Ramipril
- c. Atenolol
- d. GTN spray
- e. Amlodipine

49. A 55-year-old man attends his GP for his INR check. He has a past medical history of AF, and his target INR is 2-3. His latest 5 INR results are as follows:

January 2020	2.5
February 2020	2.6
March 2020	2.5
April 2020	2.2
May 2020	1.8

Which of the following could have caused his latest INR result?

- a. Started working in dye factory
- b. New partner who smokes 30 cigarettes a day
- c. Taking too much warfarin
- d. Started taking NSAIDs for his headaches
- e. Started a health-food diet consisting of kale and spinach

50. A 65-year-old woman presents to her GP for a follow-up after a wrist fracture. As part of the follow-up, the GP assesses her risk of osteoporosis. Which of the following elements in the history indicate a protective factor against osteoporosis?

- a. She is overweight with a BMI of 29.
- b. She leads a sedentary lifestyle
- c. She has never taken HRT for menopausal symptoms
- d. She mostly stays indoors, and does not sunbathe
- e. She is on steroid medication for rheumatoid arthritis