Diabetes

A  Peripheral neuropathy
B  Nephropathy
C  Retinopathy
D  Cataract
E  Autonomic neuropathy
F  Onset type I diabetes
G  Hyperosmolar coma
H  Ischaemic heart disease
I  Peripheral arterial disease
J  Ketoacidosis
K  Hypoglycaemia
L  Gastroparesis
M  Onset type 2 diabetes

Select the most likely situation that is described by the following case scenarios. Each option may be used once, more than once or not at all.

1  45 year old man with 20 year history of diabetes. For the last few months he has had a burning sensation in his feet.

2  72 year old man with diabetes. He has been on insulin for 6 years. His daughter had noticed that he was increasingly vague. He was found unconscious. BP 160/90. Plasma urea, creatinine & electrolytes were normal.

3  26 year old Asian man is found to have glycosuria. He has been waking up at night to pass urine for 2 months. His father & uncle are both diabetic.

4  32 year old woman who has been diabetic for 25 years. She can no longer cross a road on her own as she is worried that she may collapse.

5  56 year old man with newly diagnosed diabetes is given laser treatment.

AKMEC
Diabetes – Management

A  Blood pressure control
B  Insulin
C  Diet alone
D  Oral hypoglycaemic drug
E  Oral glucose or sugar
F  Laser treatment
G  Statin
H  Bed rest
I  Improve glycaemic control
J  Intravenous dextrose

For each scenario below, select the most appropriate treatment from the list of options. Each option may be used once, more than once or not at all.

1  A 55 year old Asian man complaining of nocturia. Random blood glucose 10.2mmol/l. He was overweight.

2  A 47 year old man with diabetes for 10 years. At review BP 130/80, glycosylated haemoglobin 8.2% (normal <6.5%), plasma cholesterol 5.7mmol/l (normal 5.2-6.5mmol/l).

3  A 52 year old man with diabetes for 15 years. Recently found to have microalbuminuria. Glycosylated haemoglobin 7.2%. BP 150/85. Cholesterol 5.2mmol/l.

4  A 55 year old woman in diabetic clinic. She has been waiting for 2 hours & starts feeling sweaty & weak.

5  A 22 year old medical student notices that he is thirsty & drinking 3-4 litres of fluid a day while studying for finals. He tests his urine & finds glucose 3+ & ketones 2+.
Diabetic Neuropathy

A Abducent (VI) nerve palsy
B Amaurosis fugax
C Autonomic neuropathy
D Carpal tunnel syndrome
E Common peroneal nerve palsy
F Diabetic amyotrophy
G Occulomotor (III) nerve palsy
H Peripheral neuropathy
I Retinopathy
J Sciatica
K Ulnar nerve palsy

1 A 45 year old type 1 diabetic patient presents with a history of feeling light-headed. On examination, he is noted to have a blood pressure of 150/90 lying & 125/70 on standing.

2 A 73 year old, previously fit male presents with difficulty ascending stairs. Abnormalities noted on examination are weakness of knee flexion, which is more pronounced on the left with some wasting of the quadriceps & diminished knee reflexes. He is noted to have glycosuria.

3 A 62 year old male diabetic presents with a sudden onset of double vision. He is noted to have a ptosis & a deviation of the right eye to the right. Pupillary size & reactions are normal.

4 A 66 year old male with type 2 diabetes complains of episodes of loss of vision in the right eye that may last up to 2 hours. On examination he is noted to have an irregularly irregular pulse of 70 beats per minute & a blood pressure of 155/95. Fundoscopy is normal.

5 A 56 year old type 2 diabetic female is admitted with pain in the feet that keeps her awake at night. The only abnormality noted on examination is loss of vibration sensation up to the mid-tibia bilaterally.
## Diagnosis of Ascites

A. **Primary biliary cirrhosis**  
B. **Right heart failure**  
C. **Primary liver tumour**  
D. **Secondary liver tumours**  
E. **Bacterial peritonitis**  
F. **Nephrotic syndrome**  
G. **Carcinoma of the ovary**  
H. **Tuberculous peritonitis**  
I. **Carcinoma of caecum with peritoneal secondaries**  
J. **Budd Chiari syndrome**  
K. **Portal hypertension**

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1. A 52 year old man presents with abdominal distension & ankle swelling. He has been drinking 6 pints of beer & half a bottle of whisky a day for some years. On examination he has palmar erythema & spider naevi on his chest.

2. A 71 year old man who has had a MI 6 months ago presents with shortness of breath & fatigue. On examination, the JVP is raised. He has pitting oedema to the knees. There is tenderness in the right upper quadrant with a smooth liver edge at 5cm.

3. A 50 year old man with a 1 month history of progressive abdominal distension preceded by increased tiredness, shortness of breath on exertion & weight loss of 10kg. There is a non-tender irregular mass in the right iliac fossa.

4. A 20 year old man presents with generalised swelling of the limbs, face & abdomen. Tests show that he has a normal blood count & liver function tests, excepting an albumin level of 18g/l & a cholesterol of 9.5mmol/l.
Diagnosis of Cardiovascular Diseases in Children

A  Kawasaki disease  
B  Hereditary angioedema  
C  Congenital nephritic syndrome  
D  Myocarditis  
E  Pericarditis  
F  Primary pulmonary hypertension  
G  Juvenile rheumatoid arthritis  
H  Acute rheumatic fever  
I  Congestive heart failure  
J  Toxic synovitis  
K  Aortic stenosis

From each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1. A 10 year old boy presents with stridor. He has h/o recurrent swelling of the hands & feet with abdominal pain & diarrhoea. His sister also suffers from similar attacks.

2. A 6 year old girl presents with spiking fevers. On examination, she has spindle-shaped swellings of the finger-joints.

3. A 12 year old boy presents with polyarthritis & abdominal pain. He had a sore throat a week ago. On examination, he is noted to have an early blowing diastolic murmur at the left sternal edge.

4. A 10 year old boy presents to casualty following a seizure during gym. On examination, he has a loud systolic ejection murmur with a thrill.

5. A 12 year old girl presents with pallor, dyspnoea, & pulse rate of 190. She is noted to have cardiomegaly & hepatomegaly.
Diagnosis of Causes of Postoperative Hypotension

A  MI  
B  Sepsis  
C  Hypovolaemia  
D  Cardiac dysrhythmia  
E  Pulmonary oedema  

Choose the single most likely diagnosis from the above options of the scenario described.

1 A 70 year old man who has had a gastrectomy for a GI bleed complains of shortness of breath. He has a heart rate of 120/min & is hypotensive. He has received 10 units of packed red cells, 3L of gelofusine & 1L of crystalloid. His postoperative Haemoglobin is 15.2g/dl.

2 A 62 year old man in recovery following abdominal surgery complains of chest pain, is pale & clammy with a heart rate of 100/min & a BP 90/65mmHg.

3 A 52 year old patient 24 hours post laparotomy for perforated duodenal ulcer is found to have a pulse rate of 120/min & BP 95/40mmHg. He is apyrexial & his WCC is 1.5 (units).

4 A 60 year old female had a fractured femur fixed 12 hours earlier. The operative blood loss was measured at 4L & was replaced intra-operatively with 3 units of packed red cells & 1L gelofusine. She has been written up for 1L dextrose saline 8 hourly. She has a heart rate of 110 & BP of 100/70mmHg.

EACC
Diagnosis of Clubbing

A  Carcinoma of bronchus
B  Bronchiectasis
C  Pleural empyema
D  Fibrosing alveolitis
E  Cirrhosis
F  Inflammatory bowel disease
G  Congenital heart disease
H  Mesothelioma
I  Hypertrophic pulmonary osteoarthropathy
J  Congenital
K  COAD
L  RA
M  Carcinoma of caecum

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 40 year old woman with weight loss & bloody diarrhoea for 14 months is noted to have clubbing of her fingernails. She has a tender swelling in the right iliac fossa.

2  A 73 year old central heating engineer presents with a non-productive cough & weight loss for the past 10 months. He has never smoked. On examination he has finger clubbing with normal breath sounds with no adventitial sounds.

3  A 30 year old medical secretary has noticed increasing breathlessness & fatigue. She recalls having had chest x-rays as a child & avoiding games at school. She is noted to be cyanotic on exercise testing & has finger clubbing.

4  A 59 year old man presents to the rheumatology outpatient department with haemoptysis, weight loss & painful swelling of the wrists. He has smoked since the age of 14.

5  A 45 year old man of no fixed abode, is seen in the A&E department, because of vomiting blood. Examination reveals a distended abdomen with prominent periumbilical veins.
Diagnosis of Diarrhoea

A Viral gastroenteritis
B Bacterial gastroenteritis
C Ulcerative colitis
D Crohn's disease
E Irritable bowel syndrome
F Constipation
G Malabsorption
H Amoebic dysentery
I Drug induced
J Thyrotoxicosis
K Blind loop syndrome
L Autonomic neuropathy
M Diverticular disease
N Cancer of the rectum
O Cancer of colon
P Clostridium difficile

For each scenario below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1 65 year old woman admitted with diarrhoea & weight loss. On examination, she has a fine tremor & was in rapid atrial fibrillation, FBC, ESR & C-reactive protein were normal.

2 A 30 year old city banker comes to the GP with symptoms of abdominal bloating, intermittent constipation & diarrhoea & occasional nausea. This has been going on for the last 6 months & there has been no weight loss of malaise. She has no blood in her stool.

3 An 18 year old student attends accident & emergency with acute onset of vomiting at 2am followed by abdominal cramps & profuse diarrhoea. He has eaten a take-away that evening. There is some blood in the stool & he has a high fever. There has been no recent foreign travel & the FBC shows a normal haemoglobin & raised neutrophils.

4 76 year old woman admitted with chest infection which was treated with cefuroxime & erythromycin. On the day prior to discharge she develops diarrhoea not associated with blood. She appears unwell. T 38°C & CRP 150.

JEBP
Diagnosis of Falls

A  Vasovagal syncope
B  Cerebrovascular accident
C  Hypoglycaemia
D  MI
E  Fracture neck of femur
F  Postural hypotension
G  Epilepsy
H  Visual impairment
I  Substance abuse
J  UTI
K  Pulmonary embolism
L  Panic attack
M  Stokes-Adams attack
N  GI haemorrhage
O  Atrial fibrillation

For each situation below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  An 18 year old secretary is out with friends & suddenly collapses on the floor & loses consciousness. She is unresponsive for a minute or 2 & was incontinent of urine. She was previously completely well. Full clinical examination is subsequently normal.

2  A 90 year old woman is found lying on the floor unable to get up & unable to move her right side. She is fully conscious & able to answer questions.

3  A 75 year old man is found on his bedroom floor by his wife & is conscious. He got out of bed in the middle of the night to go to the toilet & felt dizzy & fell to the ground. He is on treatment for hypertension & has no other significant medical problems.

4  Miss AF, a 65 year old retired solicitor, falls in your surgery. She has long-standing RA. She is coming to see you because of recent onset of indigestion & change in bowel habit. Clinically she is very pale, with a rapid pulse & BP 100/60.

5  Mr FB, an 80 year old man is brought in to the A&E after a fall at home. His wife reports that he suddenly went pale & then blacked out. He rapidly recovered consciousness & his face became red. He had a MI 10 years ago & is on atenolol & aspirin. His daughter, a nurse, noticed his pulse was slow (and irregular).
Diagnosis of Fever

A  Malaria
B  Influenza
C  Glandular fever
D  Appendicitis
E  Pneumonia
F  Lymphoma
G  Tuberculosis
H  Systemic lupus erythematosus
I  Sarcoidosis
J  Post immunisation
K  Drug reaction
L  Pyelonephritis
M  HIV infection

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 45 year old woman from Jamaica presents with a 6 month history of weight loss & a 2 week history of fever & night sweats. On examination she had cervical lymphadenopathy. Her calcium was 3.0 & CXR showed bilateral lymphadenopathy with peri-hilar shadowing.

2  A 25 year old man with a 3 day history of high temperatures, aching limbs & neck discomfort. Apart from temperature of 39\(^\circ\)C & some mild conjunctivitis, examination was normal. Antibiotics were prescribed but had had no effect.

3  A 50 year woman normally resident in the UK returned from visiting relatives in Pakistan. She described intermittent fevers with rigors, diarrhoea & severe headaches. She had experienced previous symptoms in the past.

4  A 22 year old man presented with a 2 week history of fever & drenching night sweat. He had experienced severe itching during this time. Examination was normal. CXR showed a mediastinal mass.

5  A 35 year old pregnant woman developed a temperature & increased urinary frequency. She was tender in the right loin. Full blood count showed neutrophil leucocytosis & urine was positive for nitrates on urinary dipstix.

6  A 50 year old woman presented with a temperature & aching joints, 2 days prior to her departure on holiday to Egypt. On examination she had a tender swelling on her left upper arm.

IBAFLJ
Diagnosis of Fractures & Dislocations

A  Calcaneal fracture
B  Colles’ fracture
C  Anterior shoulder dislocation
D  Posterior shoulder dislocation
E  Navicular fracture
F  Humeral shaft fracture
G  Supracondylar fracture of the humerus
H  Monteggia’s fracture
I  March fracture
J  Galeazzi fracture
K  Greenstick fracture
L  Spiral fracture of the tibia
M  Fracture of the proximal fibula

From each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once, or not at all.

1  A 33 year old man, with a history of epilepsy, presents to Casualty following a fit now unable to move his right arm & shoulder. He supports the arm in internal rotation with the other hand.

2  A 26 year old woman sustains a twisting injury to her left leg while skiing. She has mid-calf swelling & tenderness & is unable to weight-bear.

3  A 10 year old girl falls & sustains an injury to her right arm. The forearm is stiff, & the hand is deformed. She is only able to extend her fingers when her wrist is passively flexed.

4  A 28 year old marathon runner complains of pain in the second toe. He ran his last marathon a week ago.

5  A 16 year old girl falls onto her outstretched hands. She complains of pain & decreased mobility of her right wrist. On examination, she is tender in the anatomical snuffbox.
Diagnosis of Gastrointestinal Conditions

A  Hepatoma
B  Oesophageal varices
C  Mallory-Weiss tear
D  Perforated peptic ulcer
E  Fractured rib
F  Haematoma of the rectus sheath
G  Umbilical hernia
H  Sigmoid volvulus
I  Splenic rupture
J  Pancreatic pseudocyst
K  Divarication of the recti
L  Acute pancreatitis

From each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be sued once, more than once, or not at all.

1  A 50 year old alcoholic man presents with nausea, vomiting, & epigastric pain. On examination, he has a palpable epigastric mass & a raised amylase. CT scan of the abdomen shows a round well-circumscribed mass in the epigastrium.

2  A 40 year old multiparous woman presents with a midline abdominal mass. The mass is non tender & appears when she is straining. On examination, the midline mass is visible when she raises her head off the examining bed.

3  A 19 year old man presents with sudden severe upper abdominal pain after being tackled during rugby practice. He was recently diagnosed with glandular fever.

4  A 7 year old girl presents with spontaneous massive haematemesis.

5  A 55 year old male alcoholic presents with vomiting 800ml of blood. His blood pressure is 80/50 with a pulse rate of 120. He also has ascites.
Diagnosis of Headaches

A  Cervical spondylosis
B  Stroke
C  Bacterial meningitis
D  Cerebral tumour
E  Extradural haemorrhage
F  Tension headache
G  Encephalitis
H  Subarachnoid haemorrhage
I  Congenital heart disease
J  Trigeminal neuralgia
K  TIA
L  Migraine

1. A 25 year old, highly stressed Junior House Officer complains of a headache that has been persistent for weeks. She describes the pain as being “like a tight band around her head”. Over the counter medication has been used to no avail.

2. A 40 year old housewife complains of a repeated history of a unilateral throbbing headache lasting several hours for 6 months. The headache is associated with a disturbance of vision. She claims that eating cheese may trigger it.

3. A 19 year old male 1st year university student complains of a rapidly developing headache & a stiff neck. He has been vomiting & his friends say that he cannot stand to be in bright rooms. Examination reveals a pyrexia of 37.5°C.

4. A 70 year old man presents to his GP surgery with repeated episodes left sided hemiparesis. A recent ECG reveals that he is in atrial fibrillation. His symptoms fully resolve within 24 hours.

5. A 55 year old known hypertensive male complains of a sudden devastating occipital headache. He says that he feels as though he had “been kicked in the head” even though he has not experienced any trauma in the last few weeks. He is feeling drowsy & during the examination he loses consciousness.
Diagnosis of Headaches

A  Temporal arteritis
B  Meningitis
C  Encephalitis
D  Subarachnoid haemorrhage
E  Sinusitis
F  Migraine
G  Tension headache
H  Raised intracranial pressure
I  Severe hypertension
J  Analgesic rebound headache
K  Trigeminal neuralgia

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1 A 60 year old lady with recent onset unilateral headache made worse by combing her hair. Her thyroid function was in the hypothyroid range & her ESR was 60mm/hr.

2 A 70 year old man with pain in the jaw after chewing food. He has also noticed pains in his shoulder & pelvic areas over the past 3-4 weeks, plus an episode of transient visual loss in the right eye.

3 A 15 year old girl presented to her GP with headache & a rash. On examination she was pyrexial (38 degrees C), there was restricted neck movement & photophobia. She has a purpuric rash on her legs, which did not fade on pressure.

4 A 15 month old toddler developed a maculo-papular rash 10 days after receiving the MMR vaccine, followed by a swelling at the angle of the left jaw. His mother telephoned the surgery in a state of panic one morning because he is having convulsions & a high temperature.

5 A 30 year old man presented at the local A&E department with severe headaches, which he described, like an “explosion” inside his head. Whilst lying on the hospital trolley he suddenly became unconscious. There was no organism isolated in his CSF but the SHO who performed the LP commented about blood in the sample.

6 A 40 year old teacher presented with a 24 hour history of occipital headache, which became worse in the evenings after work. Her school is due for an Ofsted inspection shortly. On examination she is apyrexial but looked ill & anxious with a pulse rate of 120/min.

7 A 30 year old nurse presented with frontal headache after an acute viral illness. The pain was constant, affecting the right side of her head only. On examination there was marked tenderness on the right side of her face, over the maxillary area.
8 A 40 year old man presented with generalised pain in his head, which became progressively worse especially in the mornings. Sitting & standing made his pain worse but lying down relieved it significantly. He mentioned that he vomited twice on his way to the surgery.

9 Julie is a 20 year old student who is complaining of a right sided headache extending over the right eye. She noticed that the pain is worse in the evenings. She experienced a similar episode 3 months previously, which lasted for approximately 4 weeks. Her mother also suffers from headaches. Physical examination was unremarkable. Her BP was 120/80.

10 A 60 year old lady is complaining of an intense pain over the left frontal area, which is worse whenever she combs or brushes her hair. Eating also makes the pain worse.

11 Mr. Jones is a 50 year old man who is awaiting a hospital appointment to see an Orthopaedic surgeon. He has suffered from Lumbago for many years & consequently has not worked for the past 5 years. He has been depressed recently & has experienced difficulty in sleeping for which he was prescribed sleeping tablets. As well as his back pain he now complains of a persistent headache for which he has taken painkillers but without much symptomatic relief.
Diagnosis of Neck Lumps

A  Hodgkin’s lymphoma
B  Lymphadenopathy 2\(^{0}\) to infection
C  Lymphadenopathy 2\(^{0}\) to malignancy
D  Carotid body tumour
E  Thyroid cancer
F  Thyroiditis
G  TB lymphadenitis
H  Thyroid goitre
I  Salivary gland tumour
J  Parotitis
K  Mumps
L  Thyroglossal cyst
M  Pharyngeal pouch
N  Glandular fever

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  80 year old presents with symptoms of dysphagia. He has been a lifelong smoker. On examination there is a reducible mass over lateral aspect of the neck.

2  An anxious 19 year old female presents with a lump in the neck. She has lost 3kg in 3 months. On examination there is lymphadenopathy on both sides of the neck & larger nodes on the right. Her pulse is 96 regular; thyroid function tests are normal.

3  A 17 year old male presents with a 1 week history of fever, malaise, pain on swallowing & has found lumps in the neck. On examination a tender scrotal swelling is also noted.

4  A 58 year old male presents to his GP with a lump in the neck. He reports that he suffered from a mild upper respiratory infection in the previous week. On examination there is a hard mobile lump in the supraclavicular fossa.

5  An 18 year old girl presents with a midline swelling in the neck which has recently become tender. It moves on swallowing & on protrusion of the tongue.
Diagnosis of Patient with Vomiting

A  Pyloric stenosis
B  Viral gastroenteritis
C  Salmonella
D  Uraemia
E  Oesophageal carcinoma
F  Gastric carcinoma
G  Combined oral contraceptive pill
H  Bowel obstruction
I  Peptic ulcer disease
J  Appendicitis
K  Pancreatitis
L  Bulimia
M  Intussusception

For each patient below, choose the SINGLE most likely diagnosis from the above list. Each option may be used once, more than once or not at all.

1  34 year old male with Crohn’s disease had had no bowel motions for 4 days & has been vomiting for 24 hours. Examination reveals a distended abdomen & tinkling bowel sounds.

2  83 years old man with longstanding heart failure for which he takes digoxin & diuretics. For the last 24 hours he has been vomiting & passed very little urine. On examination he is pale & mildly dehydrated; examination of the abdomen is normal.

3  54 year old publican has 48 hour history of severe epigastric pain & vomiting. On examination he is unwell. Pulse rate is 110/min, BP 130/90. Temp 38.0°C. Upper abdomen very tender. Amylase 1000U/l.

4  34 year old man has had vomiting 2-3 times a day for 3 days. Complains of severe crampy abdominal pain & blood stained watery diarrhoea. On examination temp 37.7°C, abdomen soft; complains of generalised tenderness. No masses/rebound/guarding.

5  A 25 year old travelling salesman is awoken in his hotel with crampy abdominal pain, feeling very ill & vomits 3 times over the next half an hour. He asks the receptionist to call a doctor.
Diagnosis of Patients with Abnormal Electrolytes

A  SIADH
B  Diabetes insipidus
C  Diabetes mellitus
D  Psychogenic polydipsia
E  Primary hyperparathyroidism
F  Sarcoidosis
G  Amyloidosis
H  Addison’s disease
I  Vitamin D deficiency

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 25 year old man complains of thirst & polyuria. Investigations: Na 151mmol/l, K 4.0mmol/l, Urea 7.1mmol/l, Creatinine 115umol/l, urine specific gravity 1.005 (normal 1.001–1.035), Glucose 4.3mmol/l (3.0-6.1), Calcium 2.4mmol/l (2.2-2.6), Phosphate 0.9mmol/l (0.8-1.6).

2  A 25 year old man complains of thirst & polyuria. Investigations: Na 129mmol/l, K 3.7mmol/l, Urea 4.2mmol/l, Creatinine 90umol/l, urine specific gravity 1.002, Glucose 4.6mmol/l, Calcium 2.38mmol/l, Phosphate 1.0mmol/l.

3  A 40 year old woman complains of thirst & polyuria. Investigations: Na 145mmol/l, K 4.0mmol/l, Urea 6.2mmol/l, Creatinine 100umol/l, Urine specific gravity 1.030, Glucose 4.5mmol/l, Calcium 2.91mmol/l, Phosphate 0.4mmol/l.

4  A 60 year old man is admitted with confusion following an epileptic fit. Na 121mmol/l, K 3.2mmol/l, Urea 4.2mmol/l, Creatinine 78umol/l, Urine specific gravity 1.030mmol/l, Glucose 4.5mmol/l, Calcium 2.4mmol/l, Phosphate 1.1mmol/l.

5  A 60 year old man is admitted with confusion following an epileptic fit. Na 135mmol/l, K 3.5mmol/l, Urea 6.5mmol/l, Creatinine 98umol/l, Urine specific gravity 1.010, Glucose 4.5mmol/l, Calcium 1.9mmol/l, Phosphate 0.4mmol/l, Parathyroid hormone 85pg/ml (normal 10-50).
Diagnosis of Patients with Hepatomegaly

A RA
B Polycythaemia rubra vera
C Haemachromatosis
D CLL
E CML
F Systemic amyloidosis
G Kalaazar
H Malaria
I Congestive cardiac failure
J Severe emphysema
K Malignant melanoma
L Portal vein thrombosis
M Toxoplasmosis
N Cirrhosis with hepatoma

For each of the patients below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1 A 30 year old woman who has recently returned from holiday in the Gambia. She is in the 3rd trimester of pregnancy & complains of headaches & fever. On examination her BP is 110/70, there is a soft ESM, shotty lymphadenopathy & hepatosplenomegaly. Examination of the skin is unremarkable. Investigations revealed a Hb of 10.5g/dl, WBC of 5x10^9/l, platelet count of 80x10^9/l.

2 A 78 year old woman attends complaining of widespread itching. Examination reveals hepatosplenomegaly. The patient appears plethoric with no lymphadenopathy.

3 A 78 year old woman attends complaining of recent onset of tiredness. She is pale & has hepatosplenomegaly & generalised lymphadenopathy in the neck, axillae & groins.

4 A 60 year old woman is found to have hepatomegaly. She has a history of moderate alcohol use. She had an anterior MI 2 years previously. Examination reveals significant ankle oedema, elevated JVP & 1-2 spider naevi on her chest.

5 A 50 year old male with haemophilia & hepatitis C presents with weight loss & abdominal discomfort. He is mildly icteric with features of chronic liver disease & a large left lobe of the liver.

6 A 65 year old heavy smoker. He has been progressively short of breath over a few years. He has a smooth liver edge 2cms below the costal margin.
Diagnosis of Pleural Effusion

A  Pneumonia  
B  Pulmonary oedema  
C  Pulmonary tuberculosis  
D  Aspiration pneumonia  
E  Chest injury with rib fractures  
F  Lung metastases  
G  Carcinoma of bronchus  
H  Pleural mesothelioma  
I  RA  
J  Pneumothorax  
K  Acute asthma  
L  Pulmonary embolus  
M  COAD  
N  Sarcoidosis  
O  Subphrenic abscess

For each of the patients below, choose the SINGLE most likely diagnosis from the list of options. Each option may be used once, more than once or not at all.

1  45 year old doctor from Ethiopia with a 6 week history of fever & a left sided pleural effusion. He is a heavy smoker. On examination he is thin & looks unwell. Has nicotine stained fingers. Chest examination – trachea shifted to the left. Dull to percussion at right base with reduced breath sounds.

2  25 year old female with acute onset of chills, fever, cough with brown phlegm for 3 days. On examination she appears toxic, temperature 40°C, reduced breath sounds, bronchial breathing & stony dullness left lung base.

3  70 year old male ex-builder with progressive pain in his right chest, & with cough & shortness of breath for a few months. Chest x-ray shows pleural thickening & right pleural effusion.

4  70 year old female, heavy smoker for several years who presents with weight loss, reduced appetite & haemoptysis for 1 month. On examination she is thin, afebrile & is clubbed. She has bronchial breathing right upper zone. Reduced breath sounds & dullness on the right base. Chest x-ray shows right lung collapse with effusion.

5  10 days following abdominal surgery, a 46 year old accountant presents with a 3 day history of cough & hiccups. He is now febrile (temp 40°C) & is tachypnoeic; his liver is enlarged & tender. He has right basal effusion on chest x-ray.

6  A 50 year old Asian diabetic woman is admitted with increasing shortness of breath & ankle swelling. ECG shows inverted T waves in Levels I, AVL & V4-6. Upper lobe blood diversion & bilateral pleural effusions are found on chest x-ray.
FAHGOB
Diagnosis of Problems with a Change in Bowel Habit

A    Colorectal cancer
B    Inflammatory bowel disease
C    Irritable bowel syndrome
D    Infectious diarrhoea
E    Diverticular disease
F    Ischaemic colitis
G    Radiation proctitis
H    Benign colonic stricture
I    Hyperthyroidism

For each patient below, choose the SINGLE most likely cause of the symptoms from the above list of options. Each option may be used once, more than once or not at all.

1 A 25 year old female trainee solicitor presents complaining of bloating & excessive flatus. She is passing pellet-like stools associated with abdominal pains. Her symptoms have been intermittent for several years.

2 A 75 year old man with a 6 month history of straining at stool. He also thinks he is not emptying his rectum completely. He is passing blood & mucus per rectum. He has some weight loss & anorexia.

3 A 32 year old female presents with a 4 week history of bloody liquid stool with mucus, 9 times a day. She has anorexia, weight loss & anaemia.

4 A 19 year old male returns from a recent back packing holiday in India. He is passing bloody liquid stools about 15 times a day. He has lassitude, anorexia & a temperature of 37.5°C.

5 A 65 year old man had an elective aortic aneurysm repair 5 days ago. He now has abdominal distension & left sided abdominal pain. He is passing a small amount of blood & mucus per rectum.

CABDF
Diagnosis of Scrotal Lumps

A  Strangulated indirect inguinal hernia
B  Varicoele
C  Hydrocoele
D  Epididimo-orchitis
E  Trauma
F  Torsion of testis
G  Seminoma
H  Metastasis
I  Cryptorchidism
J  Retractile testis
K  Mumps orchitis

For each scenario below, choose a SINGLE investigation, most likely to reveal the cause, from the above list of options. Each option may be used once, more than once or not at all.

1  A 25 year old patient presents with 1 year history of painful scrotal swelling. On examination there is a hard smooth swelling of the right testis. It did not transilluminate. There was no cough impulse.

2  An 18 year old patient brought to the A&E department by his father because of sudden onset of severe painful swelling of the scrotum. There was no history of trauma. On examination – distressed young man who had difficulty in walking with exquisite tenderness of the scrotum. He was afebrile.

3  A 70 year old patient with 1 year history of swelling of the scrotum which has become painful in the last 4 days. On examination the patient is afebrile with a firm tender swelling in the left side of the scrotum extending to the inguinal region. It transilluminated & there is no cough impulse.

4  A 24 year old political refugee presents with a tender swollen right testicle of 3 days duration. Examination reveals tender mandibular swelling. Temperature 38°C. Swollen tender testicle which does not transilluminate.

5  A 52 year old company director presents with fever. He has recently returned from a conference in SE Asia. Examination – Temp 37.5°C. Few tender inguinal lymph node. Tenderness of spermatic cord & testis.
Diagnosis of Scrotal Swellings

A  Hydrocele
B  Epididymal cyst
C  Testicular malignancy
D  Testicular torsion
E  Tuberculosis of testicle
F  Squamous cell carcinoma
G  Epididymo-orchitis
H  Undescended testicle
I  Hernia
J  Varicocele
K  Cardiac failure

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 25 year old man presents with a 6 month history of painless enlargement of the left hemi-scrotum. The swelling is fluctuant, translucent, confined to the scrotum, & the testis cannot be felt separately.

2  A 17 year old man presents with a 6 hour history of sudden onset of severe left scrotal pains. The scrotum is red & swollen, the testis & epididymis are very tender.

3  A 30 year old man presents with an intermittent swelling in the right scrotum. Examination demonstrates a soft, compressible lump in the scrotum, the upper limit of which cannot be palpated.

4  A 23 year old man has a dull ache in the left scrotum. He has noticed a firm, 2cm, non-tender lump at the front of the testicle. He has moderately enlarged inguinal lymph nodes.

5  A 70 year old man presents with mild dysuria, urinary hesitancy & terminal dribbling. He also has bilateral testicular pain, swelling & tenderness of both testes & epididymis. His temperature is 37.5°C.

ADICG
Diagnosis of Urological Conditions

A  Carcinoma of the bladder
B  Carcinoma of the kidney
C  Carcinoma of the prostate
D  Acute pyelonephritis
E  Testicular torsion
F  Acute epididymo-orchitis
G  Testicular tumour
H  Inflamed hydatid de Morgani
I  Acute tubular necrosis
J  Chronic renal failure
K  Ureteric colic
L  Hydrocoele

From each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once, or not at all.

1  A 26 year old man presents with a painless lump in his left testis of 6 weeks duration. On examination, he has no inguinal lymphadenopathy. He has an elevated serum alpha-fetoprotein.

2  A 6 year old boy presents with painless haematuria & scrotal oedema of 2 days duration. His urine demonstrates granular casts.

3  A 70 year old man presents with poor stream & nocturia. On examination, he has a lemon tinge to his skin, ascites, a palpable bladder & enlarged prostate gland. His blood pressure is 170/95.

4  A 75 year old man presents with increased micturation & backache. On examination, he has a palpable bladder & an enlarged prostate. His serum acid phosphatase & alkaline phosphatase are both elevated.

5  A 12 year old boy presents to casualty with red, painful, swollen scrotum. His mid-stream urine is normal.
Diagnosis of Valvular Heart Disease & Murmurs

A  Aortic stenosis
B  Aortic regurgitation
C  Mitral stenosis – rheumatic
D  Mitral regurgitation – rheumatic
E  Mitral regurgitation – non-rheumatic
F  Infective endocarditis
G  Innocent murmur
H  Mixed aortic valve disease
I  Mixed mitral valve disease
J  Mixed mitral & aortic valve disease
K  Prolapsing mitral valve
L  Congenital aortic stenosis
M  Hypertrophic obstructive cardiomyopathy

For each situation below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 30 year old man attends for a routine pre-employment medical. On examination of the cardiovascular system, the doctor finds a soft (grade 2/6) ejection systolic murmur at the apex. He has no previous cardiac or respiratory problems, & has normal pulse & BP.

2  A 60 year old Irish woman comes to see you with a progressive 1 year history of shortness of breath & recent onset of paroxysmal nocturnal dyspnoea. She has been previously well apart from Sydenham’s chorea as a child. She had 6 normal pregnancies. On examination she has plethoric cheeks, the pulse is rapid (110/min), irregular & small volume. BP 128/80 JVP normal. The apex is in the 5th mid clavicular line & tapping in nature. The 1st heart sound is loud & P2 accentuated. A low pitched mid-diastolic murmur 2/4 is heard in the apex.

3  A 50 year old man attends A&E with shortness of breath, fever & hyperdynamic regular pulse of 100 beats per minute. BP 160/60. He has an early diastolic murmur at the left sternal edge. On further enquiry it is found that he attended for a routine dental procedure 2 months ago.

4  An 80 year old woman presents with recent onset of effort-related chest pain. On examination of the cardiovascular system she is found to have a loud ejection systolic murmur & a low pulse pressure with slow rising pulse.

5  A 65 year old man had an inferior MI 10 days ago. His initial course was uncomplicated. He suddenly deteriorates with acute left ventricular failure. On examination the pulse is regular 100/min & normal volume & character. BP 110/60. The apex beat is dynamic. There is a loud grade 6/6, apical pansystolic murmur which radiates to the axilla.

GCFAE
Diarrhoea

A  Hyperthyroidism
B  Colorectal cancer
C  Anorexia nervosa (laxative misuse)
D  Irritable bowel syndrome
E  Crohn’s disease
F  Ulcerative colitis
G  Faecal impaction
H  Salmonella
I  Coeliac disease

Match the patient description with one of the above diagnoses

1  An 80 year old male with only a past medical history of severe osteoarthritis, his regular medication being co-codramol. Recently his bowel habit has changed to very watery diarrhoea & he complains of abdominal pain. His wife has also noticed that he is becoming increasingly confused.

2  A 30 year old female with a history of bloody diarrhoea for 2 months. On further questioning the diarrhoea has been present for approximately 3 years but has never noticed blood & has become worse since giving up smoking a few months ago.

3  A 25 year old female with a history of weight loss, fatigue, abdominal discomfort & foul smelling diarrhoea. She thinks it may be attributable to certain foods, particularly when she eats bread & cereal.

4  A 50 year old female with a history of fatigue, weight loss & diarrhoea for several months. She has also experienced some chest pain & anxiousness.
## Theme: Dilemas De La Abdomen

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<tbody>
<tr>
<td>A</td>
<td>Appendicitis</td>
<td>B</td>
<td>Bowel obstruction</td>
<td>C</td>
<td>Colorectal carcinoma</td>
<td>D</td>
<td>Diverticulitis</td>
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<td>E</td>
<td>Ectopic pregnancy</td>
<td>F</td>
<td>Pancreatitis</td>
<td>G</td>
<td>Gastric ulcer</td>
<td>H</td>
<td>Hepatitis</td>
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<td>I</td>
<td>Infection de la urinary tract</td>
<td>J</td>
<td>MI</td>
<td>K</td>
<td>Biliary colic</td>
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1. A 43 year old housewife complains of a colicky pain in the right upper quadrant which radiates to the back. Associated symptoms are nausea & vomiting. She says its brought on by fatty foods & not relieved by pain killers bought over the counter. She is also jaundiced…What can it be?

2. An 89 year old retired lovely lady presents with generalised abdominal pain, nausea & vomiting of a week’s history. On questioning, she hasn’t opened her bowels & there has been no flatus…What’s the diagnosis doc?

3. A young man was rushed to A&E with right iliac fossa pain. It started in the umbilical region. He says he’s also constipated & on examination is tender on light palpitation with guarding…Ooh, let me guess…

4. An elderly man comes into hospital enquiring about his symptoms. He has abdominal pain & has lost weight. Further questioning reveals he has passed melaena & an altered bowel habit…50 points for the correct answer.

5. A 30 year old banker came in with pain in the epigastric region which radiated to his back. He says he can’t keep anything down & sitting forward helps. He is tachycardic, feverish, jaundiced, is in shock & has a rigid abdomen.

**KBACF**
Drug Overdose

A  Alakaline diuresis
B  Intravenous acetylcysteine
C  Haemodialysis
D  Intravenous naloxone
E  Oral desferrioxamine
F  Dicolbort edetate
G  Hyperbaric oxygen
H  Intravenous pralidoxime
I  Ethanol
J  Sodium calcium edetate

Match the patients described below with 1 of the above modes of management

1  A 22 year old woman who has taken 40 paracetamol tablets.
2  A 35 year old drug addict found unconscious on the floor. Pinpoint pupils were found on examination.
3  A 51 year old manic depressive man, who has taken an unknown number of extra lithium tablets & has a plasma lithium level of 4.5mmol/l.
4  A 14 year old girl who has taken at least 50 aspirin tablets (300mg each).
5  A 38 year old agricultural worker who has been accidentally exposed to an organophosphorous insecticide & has symptoms of cholinergic overactivity.
Drug Side Effects

A  Cold toes & fingers
B  Constipation & dry mouth
C  Deafness
D  Dry cough
E  Goitre
F  Indigestion & GI bleed
G  Nausea & vomiting
H  Swelling of feet & ankles
I  Peripheral neuropathy
J  Tremor

What is the frequent side effect for each of the following drugs or class of drug taken from the list above?

1  Beta-blockers (eg atenolol)
2  Beta adrenergic bronchodilators (eg salbutamol, terbutaline)
3  Erythromycin
4  Tricyclic antidepressants (eg amitriptyline, imipramine)
5  ACE inhibitors (eg captopril, ramipril)

AJGBD
Drugs Which Combat Poisoning or Overload

A Flumazenil
B Naloxone hydrochloride
C N-acetylcysteine
D Protamine sulphate
E Dicobalt edetate
F Desferrioxamine
G Vitamin K
H Penicillamine
I Ethanol
J Pralidoxime mesilate
K Methionine
L Dimercaprol

All these drugs are (or can be used as) agents to combat either poisoning or overload. Choose the most appropriate drug from the list in each scenario, if one had to be used.

1 A 17 year old girl presents to A&E having recently (<5 hours ago) taken a massive overdose of paracetamol in an attempt to take her own life. 2 hours after taking the tablets she was told that actually the girl she saw with her boyfriend was in fact his cousin & not a furtive romantic interest.

2 A rural aubergine farmer is brought to A&E & is severely ill with dizziness, headache, miosis, nausea, hypersalivation, vomiting & bradycardia. The patient is unable to communicate much but mentions a spill of volatile organophosphorus insecticides, which occurred about 9 hours ago. He is given atropine sulphate & also one other drug as an adjunct…

3 An opioid addict self-refers to A&E complaining of very severe loin pain, & mentions a strong past history of renal stones. The patient requests opioid analgesia & the doctor administers diacetylmorphine. The patient notices that the doctor has made a miscalculation by administering ten times the required dose, but is happy not to point this out. When nobody is looking, the addict self-discharges from the department. He only gets as far as the observation ward before collapsing with bradypnoea & soon becoming comatose.

4 A 49 year old man of northern European origin presents to an endocrinologist with symptoms & signs of diabetes mellitus, & also complains of long-standing fatigue & arthralgia. On extensive further investigation he is noted to have cardiomyopathy, testicular atrophy & hepatomegaly. The patient also mentions that his skin seems to have darkened somewhat over the past decade, despite no increase in sun exposure.

5 A house officer accidentally overdoses a patient with heparin. Realising his mistake, he asks for an APTT (which comes back as significantly prolonged, & is likely to worsen).

CJBFD
# Dysphagia

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<td><strong>A</strong></td>
<td><strong>Oesophageal carcinoma</strong></td>
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<td><strong>B</strong></td>
<td><strong>Diffuse oesophageal spasm</strong></td>
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<tr>
<td><strong>C</strong></td>
<td><strong>Benign oesophageal stricture</strong></td>
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<tr>
<td><strong>D</strong></td>
<td><strong>Oesophageal diverticulum</strong></td>
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<td><strong>E</strong></td>
<td><strong>Candidal oesophagitis</strong></td>
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<td><strong>F</strong></td>
<td><strong>Globus hystericus</strong></td>
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<tr>
<td><strong>G</strong></td>
<td><strong>Upper oesophageal web</strong></td>
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<td><strong>H</strong></td>
<td><strong>Achalasia</strong></td>
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1. A 65 year old obese man presents with gradual worsening dysphagia, which had been initially intermittent. He has had GORD for many years for which he is prescribed aluminium hydroxide (an antacid), however he admits to not taking it regularly as it makes him constipated.

2. A 30 year old woman presents with aspiration pneumonia. She has a long history of intermittent mild dysphagia for both liquids & solids & often suffers from severe retrosternal chest pain. Occasionally she gets food stuck but overcomes this by drinking vast amounts of water.

3. A 75 year old male smoker presents with a 3 month history of dysphagia which was initially for liquids but now includes solids. He has lost 8kg in weight over the last 5 months & on examination has lymphadenopathy.

4. A 33 year old man presented with retrosternal discomfort on swallowing but without any real difficulty swallowing. On examination he was found to have creamy plaques in his mouth & later admitted to having AIDS.

5. A 45 year old female with a history of psychological problems presented with difficulty swallowing which had been getting progressively worse over the last 6 months. She described a sensation of a “lump in the throat” but after examinations & an endoscopy no organic cause was found.
Dysphagia

A  Achalasia of cardia
B  Carcinoma of oesophagus
C  Cerebrovascular accident
D  Thyroid goitre
E  Myasthenia gravis
F  Inflammatory oesophageal stricture
G  Plummer-vincent’s syndrome
H  Carcinoma of bronchus
I  Hiatus hernia
J  Pharyngeal pouch

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 35 year old woman has a 10 year history of low retrosternal dysphagia & painless regurgitation of food in the mouth.

2  A 65 year old woman has progressive low retrosternal dysphagia, initially to solids, but now also to liquids – coming on for last 4 months. There has also been loss of appetite & 3kg weight loss.

3  A 45 year old lady presents with high retrosternal dysphagia. She has spoon-shaped nails & is noted to be pale.

4  A 40 year old man presents with dysphagia that worsens as he eats. He has droopy eyelids & sometimes has difficulty in speaking.

5  A 50 year old man has a 20 year history of acid sometimes regurgitating into his mouth from his stomach; more recently he has low retrosternal dysphagia at times.
Dyspnoea

A Alcohol heart muscle disease  
B Aortic valve disease  
C Atrial septal defect  
D Cardiac arrhythmia  
E Dilated cardiomyopathy  
F Hypertension  
G Infective endocarditis  
H Mitral regurgitation  
I Pericardial effusion  
J Pulmonary fibrosis  
K Tuberculosis  
L Viral myopericarditis

Which diagnosis do you think is the cause of the breathlessness in each patient?

1 An 18 year old girl has felt unwell for about 3 weeks, complaining of chest pains, which are worse when she lies flat. She has now become short of breath. She is admitted to hospital where she is found to be in acute pulmonary oedema.

2 During the month following his acute inferior myocardial infarction, a 56 year old man has become progressively more breathless. On examination he has a loud pansystolic murmur.

3 A 24 year old Asian man who has come to work as a chef in an Indian restaurant has a 2 month history of cough, fever, night sweats & weight loss. He has been treated with a number of antibiotics by the GP but remains unwell. He is admitted with shortness of breath & haemoptysis. On chest x-ray his heart size is normal.

4 A 42 year old man is admitted with peripheral oedema & breathlessness. A routine medical examination 6 months before, was normal. He has no murmurs, but his heart is enlarged both on clinical examination & chest x-ray. Investigations include normal liver function tests & normal C-reactive protein.

5 A 55 year old man with known carcinoma of the lungs develops shortness of breath over a few days. He has a large cardiac silhouette on his CXR but no pulmonary oedema.
ECG Diagnosis

A  Left bundle branch block
B  Right bundle branch block
C  Acute inferior MI
D  Acute anterior MI
E  SVT
F  Massive pulmonary embolus
G  Atrial fibrillation
H  Complete heart block

For each ECG below, choose the single most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.
Endocrine Disorders

A  Addison’s disease
B  Dwarfism
C  Myxoedema
D  Diabetes insipidus
E  Graves disease
F  Acromegaly
G  Plumbers disease
H  Cushing’s syndrome
I  Cretinism
J  De quervains thyroiditis
K  Diabetes mellitus

Match the patient description with one of the above diagnoses

1  A 58 year old woman with a history of frequent headaches, general tiredness, polydipsia & an increase in shoe size. She complained of a slight loss of peripheral vision in both her eyes. BMI is 31.

2  A 25 year old lady presenting with difficulty sleeping, irritability, history of palpitations, weight loss & sweating over the past year. 2 aunts had neck operations. She had a swelling in her neck, pretibial myxoedema & exophthalmos. Pulse 112 beats per min, BP 106/70.

3  A 32 year old woman with progressive tiredness over the last 2 years since the birth of her daughter. Had been fired from her job for being too slow. Admits to being constipated & having heavy periods. No family history. Pulse 54, BP 110/75.

4  A 55 year old female complains of worsening obesity over the past few years, she also has a history of high blood pressure, diabetes, osteoporosis & proximal myopathy. She has a round face & multiple bruises & thin skin.

5  Soon after birth a baby boy is transferred to ITU with symptoms of dehydration, although he is producing copious urine. Once he has been liberally supplied with fluids he recovers & appears healthy. However when he is given a test dose of DDAVP there is no change in the volume of urine he is producing. Ketones or glucose are not found in the urine.

FECHD
Endocrinology

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1. A 50 year old obese lady with weight loss, tiredness, pruritus vulvae & recurrent boils.
2. A 20 year old man with marked loss of weight, hyperventilation, drowsiness, polyuria & excessive thirst.
3. A 30 year old lady with weight loss, diarrhoea, tremor, mood swings & a swelling in her neck.
4. A 50 year old lady with weight gain, constipation, depression, heavy periods & a hoarse voice.
5. A 40 year old man with limb pains, epigastric pain with vomiting, colicky pain in his left loin. He has been feeling low & depressed recently & also complained of excessive thirst, nocturia & loss of appetite.
6. A 50 year old asthmatic lady with painful muscles, bruising, purple marks on her skin. She sustained a laceration on her left which took 2 weeks to heal. On examination she looked fat, especially around her face & trunk.
7. A 35 year old lady with weight loss, poor appetite, abdominal pains & irregular periods. On examination she had white patches on her face & dark colouring in the palms of her hands.
8. A 40 year old hypertensive man presented with weight loss. He also admits to episodes of headaches, palpitations & sweating. Examination during one of these episodes showed sugar in the urine & a blood pressure of 240/120.

AACBDEFG
Endocrinology

A  Combined FSH/LH
B  Surgery
C  GnRH subcutaneous infusion pumps
D  Thyroxine
E  Oral sugar
F  Gliclazide
G  Alfacalcidol
H  Hydrocortisone
I  Spironolactone
J  Propanolol
K  Octreotide
L  Carbimazole
M  Ethylloestradiol

Select the single most appropriate treatment for the following patients. You may use any of the options once, more than once or not at all.

1  A 71 year old lady presented with depression & personality disorder which was first noticed during long term psychiatric care. On examination there was marked alopecia & loss of facial contours.

2  A 45 year old lady came to the GP with worries about recent facial hair growth & acne. She’s noticed a steady increase in her weight recently. A blood test was taken which showed very high ACTH levels.

3  A 21 year old male presented with fatigue, weight loss, constipation & postural hypotension. On examination he had an abnormally coloured scar from his recent appendectomy.

4  A lady came to her GP due to problems trying to conceive. She says her periods have been unpredictable for the past 2 years. She’s been suffering from double vision recently. Other than that she’s been fine. On examination her eyes appeared to bulge out & had swelling periorbitally.

5  A 45 year old obese man complains of being very tired. He puts it down to lack of sleep due to having to go to the toilet a lot during the night. He finds he has blurry eyes often in the morning.
Epigastric Pain

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<tr>
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<tbody>
<tr>
<td>A</td>
<td>Acute cholecystitis</td>
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<td>B</td>
<td>Gastric ulcer</td>
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<td>C</td>
<td>Gastric carcinoma</td>
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<td>D</td>
<td>Pancreatic carcinoma</td>
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<td>E</td>
<td>Duodenal ulcer</td>
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<td>F</td>
<td>Gastritis</td>
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<td>G</td>
<td>Pancreatitis</td>
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<td>H</td>
<td>GORD</td>
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<tr>
<td>I</td>
<td>Oesophagitis</td>
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For each patient with epigastric pain, select the most likely diagnosis.

1. A 45 year old man has a 6 month history of recurrent attacks of severe epigastric pain lasting from 2 to 6 weeks. The pain occurs 2 hours after food & is relieved by drinking milk. The pain often awakens the patient at night. On examination, there is localised deep tenderness to the right of the epigastrium.

2. A 65 year old man presents with a 18 month history of recurrent attacks of epigastric pain lasting several weeks. The pain occurs immediately after eating & is relieved by lying flat or vomiting. The patient avoids spicy foods & has lost half a stone in weight. On examination, there is midline epigastric tenderness.
### Eponymous Syndromes

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<td>A</td>
<td>Henoch-Schonlein purpura</td>
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<td>B</td>
<td>Pancoast’s syndrome</td>
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<tr>
<td>C</td>
<td>Peutz-Jegher’s syndrome</td>
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<tr>
<td>D</td>
<td>Kaposi’s sarcoma</td>
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<tr>
<td>E</td>
<td>Barrett’s oesophagus</td>
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<td>F</td>
<td>Von Willebrand’s disease</td>
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<tr>
<td>G</td>
<td>Mallory-Weiss tear</td>
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1. A 67 year old smoker presents with painful shoulders & arms & a bovine cough. On examination it was noticed that he had a R-sided ptosis & small pupil & wasting of the intrinsic muscles of the hand. A CXR revealed a coin lesion. What is the diagnosis?

2. A 37 year old homosexual man presents with a 3 week history of breathlessness & a painful, swollen leg. On examination it was noted that he had some peculiar purple-looking lesions on his right eyelid & swollen lymph nodes. He also had a high temperature, & his leg was red, very tender, & hot. The diagnosis?

3. A 42 year old banker presents to A&E with a 2 day history of vomiting & passing black stools. On further questioning it was discovered that he also suffers chest pain that radiates to his neck & is worsened by hot or cold foods.

4. A 38 year old who presents to A&E on New Year’s Eve. He was brought in having had a severe episode of coughing which later resulted in him vomiting up some blood. He told the medical student who was clerking him, that he was feeling fine now & that he wanted to go back to his party.

BDEG
Erectile Dysfunction

Diagnosis Of Erectile Dysfunction

A  Autonomic neuropathy  
B  Hyperthyroidism  
C  Coronary heart disease  
D  Anxiety  
E  Depression  
F  Hypogonadism  
G  MS  
H  Diabetes mellitus  
I  Alcohol  
J  Asthma  
K  Iatrogenic  
L  Jaundice

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 54 year old obese Indian man complains to his GP of thirst & polyuria which have lasted over several months. However his main concern is his inability to perform sexually & his lack of energy.

2  A 35 year old Welsh coal-miner who was recently made redundant comes to his GP with his wife. She complains about his irritable mood, lethargy & insomnia & particularly about his lack of interest in her sexually.

3  A 45 year old Asian taxi-driver complains to his GP about his inability to obtain an erection. He has a long history of essential hypertension & is now on a salt restricted diet.

4  A 17 year old boy comes into his GP’s anxious about the size of his penis & testicles being too small & his high voice. On examination he appears to have gynaecomastia & lack of pubic hair.

5  A 20 year old male medical student comes to see his GP about a problem which occurred while on holiday in Spain. He says that he was unable to obtain an erection on 2 occasions – on the first night he put it down to alcohol, but it occurred the following night having remained sober. However he has since been able to function by himself.
Eye

A  Diabetic background retinopathy
B  Hypercholesterolaemia
C  Macular degeneration
D  Preproliferative retinopathy
E  Horner’s syndrome
F  Conjunctivitis
G  Subdural haemorrhage
H  III nerve lesion
I  Migraine
J  Acute glaucoma

Choose the likely diagnosis

1. A 67 year old woman suddenly develops a constant aching around her left eye after returning from the cinema. She complains of blurred vision in the affected eye. On examination, the left pupil was fixed & dilated & the entire eye was red. Fundoscopy revealed a cupped optic disc.

2. A 10 year old boy wakes to discover he cannot open his eyes because his lids are stuck together. When his mother prises them apart, his eyes are bright red & weeping & he cries that the sunlight is hurting them.

3. A 57 year old lorry driver attends a regular appointment with his optician. On fundoscopy, dots & blots are noted, in addition to hard exudates around the macula.

4. An 89 year old male presents with his daughter, who has become worried about his gradual decline in physical & intellectual ability over the past 8 weeks, since a fall at home. She says he complains of headaches & seems sleepy. On examination, he has a left sided hemiparesis & on fundoscopy, papilloedema is present.

5. A 46 year old lady, recently diagnoses with Pancoast’s syndrome showed the following facial signs: Miosis, enophthalmos & ptosis in her L eye & an ipsilateral absence of facial sweating.

JFAGE
Fatigue

A  Hypothyroid
B  Hyperthyroid
C  Psychological distress
D  Anaemia
E  Diabetes mellitus
F  Chronic renal failure
G  AIDS
H  Glandular fever
I  Colorectal carcinoma
J  Syndrome of inappropriate ADH secretion
K  Addison’s disease

Select one of the above to fit with the following cases.

1  A 50 year old man who feels TATT. He recently noticed pigmentation of his skin & has lost some weight.

2  A 16 year old girl who feels TATT. She had a sore throat prior to this but which has now gone. She is concerned because she is unable to study for her up coming exams. She has noticed her boyfriend has had similar symptoms.

3  A 15 year old boy who is TATT. He is also suffering from polyuria, & thus nocturia 3-4 per night, & polydipsia.

4  A 32 year old homosexual man is TATT which is associated with weight loss & red lesions on the skin.

5  A 22 year old lady who feels TATT. She has also gained a large amount of weight, feels constipated & feels very cold all the time. HR ~ 45bpm.

KHEGA
Fever with Patients Recently Arrived from Abroad

A Neisseria meningitidis type B
B Entamoeba histolytica
C Mycobacterium tuberculosis
D Salmonella typhi
E Streptococcus pneumoniae
F Influenza
G Legionella pneumophila
H Lassa fever
I Dengue virus
J Falciparum malaria

For each of the patients below, choose the SINGLE most likely microbe from the above list of options. Each option may be used once, more than once or not at all.

1 A 40 year old man returned from India 4 days ago & came down with fever. He went to his GP & got some paracetamol. His fever persisted, & he had a few bouts of diarrhoea & cough. He started getting drowsy & was admitted from casualty where his blood culture was taken. The next day the lab reported Gram negative bacilli seen on blood culture.

2 50 year old man went for Hajj. He was vaccinated against hepatitis & Group C meningococci. He came back with a high fever & was admitted with neck stiffness & drowsiness. He had a lumbar puncture & blood cultures. Gram stain of cerebrospinal fluid showed Gram negative diplococci.

3 40 year old social worker, lived in India & the Far East for the last 2 years. He came back with an intermittent fever of 2 months duration. On examination the GP noted tenderness & swelling of the right hypochondrium. He was sent to the hospital where on ultrasound a liver abscess was found.

4 30 year old stone mason came from India to work on a temple being constructed. He presented to the GP with history of fever, night sweats & cough of 3 months duration. Chest x-ray showed a cavitating shadow.

5 22 year old student went to Thailand on holiday. A week following his return he presented to his GP with a flu like illness & high fever. The GP took his blood & sent it for full blood count. The haematology lab rang & gave the diagnosis & said the patient needed immediate admission.

DABCJ
**Fluid Balance**

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<tbody>
<tr>
<td>A</td>
<td>Intravenous saline</td>
<td>Blood transfusion</td>
<td>Intravenous colloid</td>
<td>Intravenous dextrose</td>
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<td>B</td>
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<td></td>
</tr>
<tr>
<td>C</td>
<td>Intravenous dextrose/saline</td>
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<tr>
<td>D</td>
<td>Intravenous sodium bicarbonate</td>
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<td>F</td>
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<tr>
<td>G</td>
<td>Measure urea &amp; electrolytes</td>
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<tr>
<td>H</td>
<td>Intravenous plasma</td>
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<td>I</td>
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<tr>
<td>J</td>
<td>Administer diuretics</td>
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For each patient described below, choose a SINGLE most appropriate initial management from the above list of options. Each option may be used once, more than once or not at all.

1. An 80 year old woman is admitted with vomiting. Her blood pressure is 120/80mmHg, pulse rate 90/min, with warm peripheries. Plasma urea is 25mmol/l, & creatinine 120umol/l.

2. A 70 year old man after a laparotomy has been given 4L of dextrose/saline intravenously in 24 hours. He is tachypnoeic, with BP 130/90, pulse 120/min & has bilateral basal crepitations.

3. A 20 year old man has been involved in a road traffic accident & the ambulance has just arrived. He has severe left upper abdominal tenderness, blood pressure 80/60 & pulse 140/min.

4. A 25 year old woman is admitted semi-comatose. She has been complaining of increasing thirst & lethargy over the previous few weeks. BM stick result is 36mmol/l. Blood pH is 7.10 with a HCO\(_3^-\) of 15mmol/l.

5. A 75 year old man underwent an anterior resection for rectal cancer 48 hours ago. He now has a urine output of 25mls/hr, BP 110/80, pulse 90/min. His Hb is 7.9g/dl.
Gastrointestinal System

A  Duodenal ulcer
B  Gastric ulcer
C  Liver cirrhosis
D  Chronic hepatitis
E  Ulcerative colitis
F  Crohn’s disease
G  Irritable bowel syndrome
H  Hiatus hernia
I  Reflux oesophagitis
J  Cancer of the pancreas
K  Carcinoma of oesophagus
L  Primary biliary cirrhosis
M  Coeliac’s disease
N  Pancreatitis
O  Cancer of the liver

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1. A 45 year old lady presenting with intense pruritus, joint pains & tiredness. She has also noticed that her stool is pale & urine very dark. On examination she was clubbed. Xanthomata & xanthelasmata were seen on her skin. Her liver & spleen were palpably enlarged.
2. A 70 year old man presents with general malaise, weakness & right upper quadrant abdominal pain. On examination he looked ill & was clinically jaundiced. There were spider naevi, palmar erythema, leuconychia, Dupuytren’s contracture & gynaecomastia. His liver was enlarged & felt hard with a bruit on auscultation.
3. A 25 year old lady presented with fever, abdominal pains & weight loss. She was opening her bowels x 10-12/day with blood & mucus.
4. A 40 year old anxious lady with intermittent abdominal pain relieved by defecation. Her abdomen feels distended & her stool, alternated between diarrhoea & constipation.
5. A 70 year old diabetic man, who smoked 40 cigs/day for 40 years. He presents with abdominal pain worse at night & radiating to his back. He is losing weight, suffers from dyspepsia & pruritus. On examination he is cachectic, jaundiced & has an enlarged gallbladder.
For each of the following eponymous terms select the appropriate response from the above list.

1. Osler-Weber-Rendu syndrome
2. Pott’s disease
3. Weber’s disease
4. Hansen’s disease
5. Dressler’s syndrome
GI Bleeds

A  Crohn’s disease
B  Ulcerative colitis
C  Mallory-Weiss tear
D  Oesophagitis
E  Oesophageal varices
F  Meckel’s Diverticulitis
G  Duodenal ulcer
H  Gastric ulcer
I  Benign polyps
J  Oesophageal malignancy

1  A 40 year old female who had been taking Ibuprofen as pain relief when she gets headaches presents to A&E with a history of melaena, & a pain in her epigastric region which is worse on eating.

2  A 25 year old Jewish man presents to A&E with some abdominal discomfort, weight loss with associated loss of appetite, a history of diarrhoea & bloody stools. An endoscopy & colonoscopy is booked to localise the area of affected bowel.

3  A 36 year old gentleman presents with a 36 hour history of diarrhoea & vomiting following a takeaway meal the day before. In the last few hours he has increasing amounts of bright red blood in his vomit.

4  An 80 year old man presents with a 6 month history of increasing weakness & a 1.5 stone weight loss, vague abdominal pain & some episodes of black stools. He appears cachetic. He is a long term smoker.

5  A lady with a 6 year history of dyspepsia presents to her GP with a 24 hour history of dark brown vomit & epigastric pain radiating to her back.

6  A very worried couple bring a young child to A&E with painless red blood coming from the back passage. Some blood tests are done & she is found to have iron deficiency anaemia.
Haematology

A  Iron deficiency anaemia  
B  Pernicious anaemia  
C  Sickle cell anaemia  
D  Thalassaemia  
E  Haemophilia  
F  Acute lymphoblastic leukaemia  
G  Acute myeloid leukaemia  
H  Chronic lymphocytic leukaemia  
I  Chronic myeloid leukaemia  
J  Hodgkin’s lymphoma  
K  Non Hodgkin’s lymphoma  
L  Myeloma

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1  A 60 year old man with bone pain (back, ribs, femur & humerus affected). 
   Investigations showed high ESR, high Ca$^{2+}$, high urea, high creatinine & punched-out lesions on his skeletal x-rays.

2  A 42 year old man with a solitary, painless, enlarged lymph gland in his neck. He also noticed some recent loss of weight, fever & night sweats. He gave up drinking because it caused pain in the lymph gland.

3  A 50 year old man with weight loss, tiredness, fever, night sweats & abdominal pain. On examination his spleen was palpably enlarged & there were multiple bruises on his body. Investigations showed low Hb; WBC 150x10$^9$/l.

4  A 20 year old West Indian lady with pain & swelling of her hands & feet. Investigations showed Hb 6g/dl; reticulocytes 15%.

5  A 50 year old lady with tiredness, weakness & breathlessness. She also complains of tingling in her fingers & a sore tongue. Investigations showed Hb 5g/dl; MCV 120fl.

6  An 18 year old girl with tiredness, faintness & heavy periods. Investigations showed Hb 8g/dl; MCV 65fl, ZPP 80.
<table>
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<tr>
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<th>Case Study</th>
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<tr>
<td>A</td>
<td>A 3 year old girl presented with several bruises over her body &amp; tiredness. On examination she appeared pale &amp; had petechial haemorrhages. Blood tests revealed decreased Hb, raised WCC &amp; a thrombocytopenia. Peripheral blood film showed the presence of blast cells.</td>
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<td>B</td>
<td>A 68 year old lady presenting with tiredness, vertigo, tinnitus &amp; bleeding. Further history revealed itching, especially after a hot bath &amp; a PMH of angina. On examination she appeared plethoric with a BP of 170/110 &amp; splenomegaly. Blood tests revealed increases in all the following: Hb, PCV, red cell mass, WCC &amp; platelets. PaO₂ was normal.</td>
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<tr>
<td>C</td>
<td>A 28 year old woman who has suffered a miscarriage presented with nose bleed &amp; large bruises. She is acutely ill &amp; shocked. Her blood tests show very prolonged APTT &amp; PT. Fibrinogen is decreased &amp; she has a severe thrombocytopenia.</td>
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<td>D</td>
<td>A 65 year old woman presenting with gradually worsening tiredness, SOB, headaches &amp; of feeling faint. PMH included thyroid disease. On examination her skin had a ‘lemony yellow’ tinge, pulse of 100 &amp; glossitis. Neurological examination revealed a decreased vibration sense on both arms &amp; legs. Blood tests showed a Hb of 5g/dl, MCV = 120fl &amp; very low serum B12. A Schilling test showed increased excretion of B12 with added Intrinsic Factor.</td>
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<tr>
<td>E</td>
<td>A 6 year old boy presenting with bruising &amp; painful swollen knees. Clotting screen showed raised APTT &amp; decreased factor IX. TT, PT &amp; vWF levels were normal.</td>
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Haemoptysis

A  Goodpasture’s disease
B  Mesothelioma
C  Microscopic polyarteritis
D  Pulmonary abscess
E  Pulmonary embolism
F  Pulmonary metastases
G  Small cell carcinoma
H  Squamous cell carcinoma
I  Streptococcal pneumonia
J  Tuberculosis

Choose the most appropriate diagnosis from the above list, assuming that all of the patients have presented with haemoptysis.

1. A 63 year old tramp presents to the A&E department with a 4 day history of haemoptysis. He has felt unwell for about 2 months with a cough, loss of weight & generalised weakness. He attributes his diplopia, which started a fortnight ago, to excessive alcohol consumption. On examination he has bilateral ptosis & proximal weakness in the limbs which improves on repeated testing.

2. A 20 year old man with cystic fibrosis presents to the chest clinic with haemoptysis. He has felt unwell for a fortnight with increased sputum production, fever & rigors. Gram stain of the sputum shows Gram-positive cocci in clusters.

3. A 48 year old woman with ovarian carcinoma presents to the A&E department with a 12 hour history of haemoptysis associated with dyspnoea & pleuritic pains. On examination she is apyrexial & has a right sided pleural rub. The chest x-ray shows a wedge shaped infarct peripherally on the right but is otherwise normal.

4. A 51 year old social worker presents to her GP with haemoptysis. On further questioning she admits to having a productive cough for 6 months & to losing 2 stones in weight over the same time. Chest x-ray shows patchy consolidation & scarring in both apices.

5. A 34 year old man presents to the A&E department with a short history of haemoptysis. He has had a cough for a fortnight & noticed his ankles beginning to swell 5 days ago. Initial blood tests show a creatinine of 400mol/l. An autoantibody screen is positive for p-ANCA & anti-glomerular basement membrane antibodies.
Haemoptysis

A Chest x-ray
B V/Q scan
C Bronchoscopy
D History only
E Clotting screen
F Sputum cultures
G Chest CT
H ABG
I Lung biopsy
J Lung function tests

Which single investigation is the most appropriate to confirm the likely diagnosis in the patients described below?

1. A 35 year old man presents to A&E with a short history of haemoptysis & breathlessness. His pulse is 125bpm & he has recently travelled to Australia. Chest examination is unremarkable.

2. A 30 year old Indian lady who has recently returned from a 4 month trip to Delhi complains of a cough & haemoptysis & night sweats over the last month.

3. A 19 year old man who has been intubated due to a recent RTA is recovering well & is extubated. He complains of coughing up a small amount of blood streaked phlegm.

4. A 55 year old lawyer who has had a chronic cough for 3 months complains of 1 episode of haemoptysis. She is a heavy smoker (about 40/day) & has experienced some recent weight loss.

5. A 40 year old man complains of breathlessness & coughing up blood for 3 days. He mentions that prior to this he had fallen onto the corner of a table. Breath sounds seem slightly reduced on the right had side.

BFDCA
Haemoptysis

A  COPD
B  Bronchiectasis
C  Bronchial carcinoma
D  Pulmonary TB
E  PE
F  LVF
G  Streptococcal pneumoniae
H  Mycoplasma pneumoniae
I  Trauma
J  Sarcoidosis
K  Primary pulmonary hypertension

Choose the most likely diagnosis from above for the following

1 A 30 year old Afro-Caribbean patient comes to A&E with a rash on his cheeks, nose & his shins. The CXR shows bilateral hilar lymphadenopathy.

2 A 49 year old lady comes to A&E with severe haemoptysis. She has a history of continuous production of foul-smelling khaki-coloured sputum & she had a past medical history of whooping cough as a child.

3 A male 45 year old patient from India presented with a 3 week history of tiredness, loss of weight & haemoptysis. The left lung base was stony dull on percussion.

4 A 60 year old patient presents with shortness of breath & haemoptysis. On examination the patient is tachycardic & tachypnoeic & has swollen ankles, on listening to the chest he has basal crepitations.

5 A 69 year old lady presents with a sudden onset of fever, productive cough of purulent rusty coloured sputum. Examination of the chest showed signs of consolidation.
Headache

A  Glaucoma
B  Tension headache
C  Migraine
D  Encephalitis
E  Analgesic rebound headache
F  Sinusitis
G  Cluster headaches
H  Subarachnoid haemorrhage
I  Extradural haemorrhage
J  Meningitis
K  Hangover

What is the most likely diagnosis?

1. A 34 year old lady presents to her GP with a 1 week history of an aching dull pain under her eyes & cheeks, worse on bending over.

2. A hockey player presents to A7E after having been knocked unconscious in a match. He complains of a generalised headache, not relieved by OTC analgesics. When you go to clerk the patient, he appears drowsy & unresponsive.

3. A fresher presents to A&E with a 24 hour history of headache, vomiting & aversion to bright lights.

4. A young lady presents to her GP complaining of severe unilateral headaches, associated with nausea & increased awareness of sounds before onset of headache.

5. A 54 year old male smoker presents to his GP with a 2 day history of rapid onset, severe pain around 1 eye. The pain was unilateral & affected the same side, lasted ~40 minutes & occurred at night.
Headaches

A  Cluster headache
B  Migraine
C  Benign intracranial hypertension
D  Temporal arteritis
E  Tension headache
F  Meningitis
G  Tumour
H  Glaucoma
I  Cerebral abscess
J  Subarachnoid haemorrhage

What is the MOST LIKELY diagnosis for each of the 5 patients?

1  A 38 year old managing director visits her GP complaining of intermittent attacks of tightness & pressure of the front & back of her head, which sometimes radiates down to the neck. There is no associated vomiting or visual disturbance. She admits feeling depressed about a recent divorce but she was busy at work so did not think about the subject too much.

2  An elderly diabetic lady aged 70 called her GP out on a home visit after suffering from an acute headache, with associated blurred vision & vomiting. The pain was localised to the upper anterior region of her head.

3  A 17 year old student is taken to A&E after a rugby match. He had been complaining of a sudden severe headache, stiff neck, nausea & had vomited in the car on the way. He was apyrexial & not completely conscious of his surroundings & complaining about the lights being too bright.

4  A 22 year old obese woman went to her GP about her headache, which had begun to worry her, as it was gradually worsening over the past few weeks. She had definitely noticed that it was worse in the morning. She was also feeling nauseous & was suffering from disturbances in her vision.

5  A 29 year old teacher is sitting at work eating her cheese sandwich when she starts to feel unwell & is unable to see properly, this lasts for about 10 minutes. Then 1 side of her head starts to severely throb & she begins to feel nauseous. The lights in the staff room & the noise of the children make her feel worse. She goes home & after 4 hours, her head stops hurting & she falls asleep.
Headaches

A Stress
B Sinusitis
C Migraine
D Cervical spondylitis
E Cluster headache
F Meningitis
G Benign intracranial hypertension
H Space occupying lesion
I Subarachnoid haemorrhage

1 A 20 year old student presents to her GP with a 12 hour history of malaise, diarrhoea & severe bi-frontal aching headache. Whilst being examined she suffers an episode of vomiting. GP notes conjunctival petechiae.

2 A 40 year old man presents to his GP with a 14 day history of severe, stabbing right sided headache, centred behind the orbit & radiating to cheek & jaw. The pain wakes him up at night, every night, & has noticed his right eye becomes bloodshot & waters a lot. Alleviated by pacing up & down by his door. Headache passes after 1 hour.

3 A 35 year old woman presents with a 6 week history of headaches with blurred vision & nausea. Headaches worse in the morning when she wakes up. Exacerbated by coughing & laughing. On examination she is distressed. A hard lump ~ 2cm by 3cm felt in the left breast & associated lymphadenopathy in the left axilla.

4 A 25 year old female presents with a 4 month history of severe, episodic headaches with associated visual disturbances & vomiting. Day before each episode she feels unwell, off her feet & nauseated. Within 24 hours, unbearable left side headache begins, associated with flashing lights across the visual field.
Headaches

A  Analgesics only
B  Injection of benzyl penicillin & hospital admission
C  Dexamethasone
D  Referral to a psychiatrist
E  Urgent MRI scan
F  Reassurance
G  Oral steroids & an ESR estimation
H  Carbamazepine
I  Physiotherapy & a non-steroidal anti-inflammatory drug
J  Lifestyle & relaxation advice

What immediate management option apart from prescribing analgesics is the most appropriate for the following patients?

1  A 75 year old man with a 4 week history of right sided headache all the time & only partially responding to analgesics. He complains that it really catches him when brushing his hair & there is tenderness above & lateral to his right eye.

2  A 75 year old man who last year had radiotherapy for a primary bronchogenic carcinoma. He has done well but over the last 3 weeks he has woken with a headache & has noticed some progressive weakness in his left hand.

3  A 50 year old lady who complains of shooting pains around & above one eye that are unbearable when triggered by the cold or by cleaning her teeth.

4  A 25 year old PhD student who frequently gets bi-temporal headaches that feel like a tight band across her head. She is worried that these headaches may be due to a brain tumour as her brother’s friend has recently been diagnosed as having one.

5  A 19 year old undergraduate who feels she has influenza but has a 6 hour history of increasing severe headache, has vomited once, doesn’t want to be moved as this makes the pain worse. On examination you notice a bruise on her abdomen, but she denies any trauma.
Hospital Acquired Infections

A Pseudomonas aeruginosa
B Klebsiella pneumonia
C MRSA
D Respiratory syncytial virus
E Vancomycin – resistant enterococcus
F Cryptococcus neoformans
G Pneumocystis carinii
H Streptococcus viridans
I Herpes simplex, type 1
J Staphylococcus epidermidis
K Streptococcus groupA
L Salmonella enteritidis
M Bacillus cereus
N Rotavirus

For each patient below, choose the SINGLE most likely microbe from the above list of options. Each option may be used once, more than once or not at all.

1 A 60 year old man was admitted for coronary artery bypass graft. 3 days following his operation, his blood culture grew coagulase-positive staphylococcus sp. which was resistant to flucloxacillin. His wound swab also grew the same organism. Isolates of 4 other adjacent patients were the same as was the nasal swabs of 1 of the surgeons. These isolates were subsequently shown to be of the same as phase-type.

2 A 50 year old man was admitted with acute pancreatitis for which he underwent an emergency pancreatectomy. He remained in ITU for 4 weeks for respiratory support. He remained febrile & septic; his blood cultures & wound swabs grew gram positive cocci in chains, which grew on MacConkey plate & was aesculin-positive. This isolate was also resistant to the conventional anti-streptococcal antibodies.

3 A patient with 20% burns with open wounds is awaiting skin grafting. The wound swab grew gram-negative bacilli that produced a green pigment & was oxidase-positive. A similar organism was isolated from other patients on the same unit. Bacteriological typing subsequently proved all the isolates at the same time.

4 Following Christmas dinner in hospital 8 out of the junior doctors came down with fever & diarrhoea 18 hours later. On interrogation some patients in different wards were found to be similarly affected. The common food history of all those sufferers was the Christmas turkey. Stool cultures grew gram-negative bacilli that were oxidase & urease negative & gave positive agglutination.

5 3 patients on the same ward came down with diarrhoea & vomiting in the medical firm within 24 hours. The attention is drawn to the ward sister that many patients started their symptoms at the same time. Stool cultures were sent for bacterial cultures & viral studies. Subsequently, the diagnosis was obtained by electron microscopy, which showed the same isolate for all patients.

CEALN
From the list above, select the most appropriate diagnosis or comment for each of the patients below.

1. A 58 year old male has had increasing difficulty swallowing. He has lost 10kg in the past 2 months. Upper GI endoscopy reveals a nearly circumferential irregular & ulcerated mass in the mid oesophagus.

2. An 80 year old man has had increasing nocturia & difficulty in passing urine for the past 9 years. PSA level is normal for his age & rectal examination reveals a smooth rounded prostate. The biopsy is likely to show

3. A 50 year old man has a rapidly growing mass in the thigh. A biopsy shows spindles of malignant cells.

4. A 76 year old man presents with back pain & on investigation has a paraproteinaemia. Bone marrow biopsy is likely to confirm

BDFH
Hypertension

A Primary hyperaldosteronism (Conn’s syndrome)
B ‘Essential’ hypertension
C Renovascular disease
D Isolated systolic hypertension
E Cushing’s syndrome
F Metabolic syndrome (Insulin resistance/Syndrome X)
G Phaeochromocytoma
H Coarctation of the aorta

For each of the patients below, select one of the above as the most likely underlying cause for their hypertension. BP is seated blood pressure unless specified otherwise.

1 A 44 year old man, BP 175/110mmHg, plasma potassium 2.2mmol/l.
2 A 52 year old woman, with recurrent episodes of severe anxiety, when her family note that she becomes very pale. BP is up to 220/124mmHg during an attack, 150/90mmHg otherwise. Her pulse rate does not increase significantly during attacks.
3 A 59 year old man, body mass index 29, random blood sugar 12.5mmol/l, total cholesterol 5.2mmol/l, HDL cholesterol 0.75mmol/l, BP 162/105mmHg.
4 A 60 year old woman, body mass index 22, normal sugar, lipids & electrolytes, BP 165/102mmHg.
5 An 81 year old woman, well apart from mild osteoarthritis, no metabolic abnormalities, BP 188/78mmHg.
Hypotension

A Cardiogenic shock
B Septicaemia
C Volume depletion
D Autonomic neuropathy
E Pulmonary embolus
F Blood loss
G Drug induced
H Addison’s disease
I Arrhythmia

Match the cause of hypotension to the following case histories

1 33 year old woman complains of giddiness on standing & can no longer cross a road on her own as she is worried that she may pass out. She developed diabetes when age 12 & has had treatment to her eyes 2 years ago.

2 76 year old woman was admitted with confusion. She had been increasingly unable to care for herself. On admission, she was found to have cool peripheries & her blood pressure was 100/70. Blood results showed plasma urea 25mmol/l & plasma creatinine 120umol/l.

3 22 year old man presented with vomiting. He had not been feeling himself for some weeks. On examination, the skin creases of his hands were dark. Blood results showed plasma urea 8.5mmol/l, sodium 121mmol/l & potassium 5.1mmol/l.

4 45 year old man presented with severe chest pain radiating down his left arm. He was pale, cold & sweaty. Blood pressure was 80/50mmHg, pulse rate was 100 & regular. JVP was raised by 3cm & auscultation of the chest revealed basal creps. Over the next few hours, he became progressively short of breath despite being given intravenous diuretics. Chest x-ray showed signs of pulmonary congestion.

5 67 year old man was observed to be very drowsy 12 hours after an aortic aneurysm repair. There had been considerable blood loss & he had been given 4 units of blood during surgery. He had been written up for pethidine 50-100mg 3 hourly postoperatively & had had 3 doses. BP had been 150/80 post-operatively & was now 100/60 with a pulse rate of 75/minute. Oxygen saturation was low at 85%.
Infectious Diseases

A Malaria
B Influenza
C Tetanus
D Tuberculosis
E Toxoplasmosis
F Enteric fever
G Herpes zoster (shingles)
H Viral hepatitis
J Cholera
K Glandular fever
L HIV
M Polio
N CMV (cytomegalovirus)
O Syphilis
P Rabies
Q Giardiasis

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1 A 30 year old man became unwell 4 weeks after a holiday in Africa. He developed headaches, muscle pains, feeling cold, severe rigors, high fever, flushing, vomiting & profuse sweating.

2 A 50 year old man became unwell after a holiday in India. He developed a fever, tiredness, night sweats & a productive cough. He lost half a stone in weight since his return from holiday 6 weeks ago.

3 A 20 year old student with a sore throat, fever, anorexia, malaise & lymphadenopathy. She was treated for tonsillitis by her GP but did not complete the course because she developed an allergic rash.

4 A 60 year old diabetic man with fever, malaise, headache & muscle pains. After a few days he started vomiting, became very ill & was confined to his bed.

5 4 weeks after a holiday in the Far East, a 30 year old lady presented with anorexia, fever & joint pains. Jaundice appeared a week later & on examination her liver & spleen were both palpably enlarged & very tender.

6 A 40 year old business man travels frequently to the Far East & Africa. He became generally unwell with a fever, generalised lymphatic swelling, & diarrhoea. On examination he was noted to have oral candidiasis.

7 A 25 year old man developed a fever, malaise, lymphadenopathy & a rash on the palms of his soles of his feet. 6 weeks earlier he had a painless ulcer on his penis.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>8</td>
<td>A 30 year old man lacerated his leg in the garden, 2 months later he developed fever, &amp; headache followed by a permanent grin-like posture, inability to close his mouth, arching of his body with hyperextension of his neck.</td>
</tr>
<tr>
<td>9</td>
<td>A 20 year old lady became ill 2 weeks after a holiday in Brazil. She developed fever, headache, cough &amp; constipation, which turned to diarrhoea 10 days later. She also noticed a rash on her trunk.</td>
</tr>
<tr>
<td>10</td>
<td>A 30 year old man who recently returned from a holiday in Bangladesh. He developed profuse watery diarrhoea, fever &amp; vomiting.</td>
</tr>
<tr>
<td>11</td>
<td>A 12 year old boy with a flu like illness, stiffness followed by fever, headache, vomiting, neck tremor of the left side of his body &amp; weakness of his left leg.</td>
</tr>
<tr>
<td>12</td>
<td>A 20 year old man was bitten by a dog in France. 2 months later he developed a headache, fever &amp; abnormal behaviour including the fear of water.</td>
</tr>
<tr>
<td>13</td>
<td>A 40 year old lady recently returned from a holiday in Leningrad developed tiredness, flatulence, abdominal bloating &amp; loose stools.</td>
</tr>
</tbody>
</table>
Infectious Diseases

A Neisseria meningitidis
B Streptococcus pneumoniae
C Mycobacterium tuberculosis
D Streptococcus viridans
E Plasmodium falciparum
F Clostridium difficile
G Plasmodium malariae
H Salmonella typhi
I Escherichia coli
J Mycobacterium leprae

1 A 24 year old medical student has just come back from a 5 week elective in Gambia. Mid way through his stay he accidentally drank a glass of water which he didn’t know where it came from. He presents to A&E today with a fever, headache, diarrhoea, abdominal pain & loss of appetite. He is very worried because people who drank water from a well in the area had similar symptoms to him.

2 An 18 year old boarding school student is called to see you by his teacher. The student, who was well the previous day, didn’t attend his classes today because he had a severe headache & couldn’t move his neck. He also had a high fever & the teacher noticed a non blanching rash on his arm.

3 A 30 year old teacher has been teaching English in Africa for a month when she falls ill with a non specific flu like illness, with a fever peaking every 3 days. She is tired on chloroquine & her symptoms do not get better. Help what has she got?!

4 A 72 year old gentleman with known COPD presents to A&E with a fever, cough producing purulent rust coloured sputum, a pain in the right side of his chest which “catches his breath” when he is breathing. On examination his respiration rate is 28, he has reduced chest expansion & increased tactile vocal fremitus on his right side.

5 A 40 year old Turkish man is referred to A&E. He has a 3 week history of night sweats, a cough producing purulent sputum & some haemoptysis. He tells you he is homeless & often takes drugs intravenously. His chest x-ray shows a right sided pleural effusion.
**Inflammation, Healing & Repair**

A  Neutrophil  
B  Giant cells  
C  Fibrosis  
D  Resolution  
E  Regeneration  
F  Macrophage  
G  Aneuploid cells  
H  Reed Sternberg cells  
I  Vasodilation  

From the list above, match the cell or process with the statement below.

1  Sputum cytology from a 30 year old homeless man with patchy shadowing on his chest x-ray.

2  An x-ray following antibiotic treatment of lobar pneumonia.

3  Myocardium following an infarct.

4  The liver after blunt trauma due to an RTA.

5  The skin after a burn due to steam from a kettle.
Interpretation of Chest Physical Signs

A  Pleural effusion
B  Pneumothorax
C  Lobar collapse
D  Lobar pneumonia
E  Hyperventilation
F  Pleurisy
G  Pulmonary oedema
H  Emphysema
I  Chronic bronchitis
J  Fibrosing alveolitis

For each description of a chest examination below, choose the SINGLE most likely diagnosis of shortness of breath from the above list of options. Each option may be use once, more than once or not at all.

1  Trachea deviated to the right. Hyper-resonant percussion on the left side with reduced breath sounds.

2  Trachea deviated to left. Dull to percussion & reduced breath sounds at left base.

3  Reduced chest movements bilaterally. Using accessory muscles of respiration. Breath sounds generally quiet.

4  Bilateral fine basal crepitations. JVP not visible.

5  Trachea central. Reduced chest movement on right. Dull to percussion on right. Bronchial breathing at right base.

BCHJD
Investigating Haematuria

A  Abdominal ultrasound
B  Biopsy of prostate
C  Intravenous pyelogram
D  Prostate specific antigen blood test
E  Urine cytology
F  ASO titre blood test
G  Cystoscopy
H  MSU: Microscopy & culture
I  Retrograde pyelogram
J  X-ray lumbar spine

Which investigation from those listed above should be done initially to confirm the diagnosis in the following patients?

1  A fit 30 year old man comes for an insurance medical & is found to have microscopic haematuria & on abdominal examination is found to have 2 large smooth masses about 20cms by 12cms in each flank.

2  A 25 year old woman comes back from holiday complaining of a 2 day history of frequency & dysuria. On dipsticking the urine you find red cells, leukocytes & protein.

3  A 75 year old man who presents with frank haematuria. He tells you that 3 years ago he had a similar episode & was diagnosed as having ‘warts in the bladder’. After treatment, he moved & was lost to follow-up but had been symptom free since then.

4  A 45 year old man wakes in the night with severe pain in his right flank radiating round to the front & into his groin. He can’t get comfortable, but on examination his abdomen is soft with no masses. His urine shows a trace of blood but no other abnormality.
Investigation of a Swollen Joint

A  Urate crystals on joint aspiration
B  High serum urate
C  Pus cells on joint aspiration
D  Rheumatoid factor positive
E  Anti-nuclear antibody positive
F  Pyrophosphate crystals on joint aspirate
G  High ESR
H  Erosions on x-ray
I  Positive blood culture
J  High WBC

For each of the following patients choose the SINGLE investigation & result that is most diagnostic from the above list of options. Each option may be used once, more than once or not at all.

1  A 35 year old woman has pain & stiffness in her hands, wrists, elbows, knees & ankles. There is swelling of her metacarpo-phalangeal joints bilaterally. There is a nodule on her left elbow.

2  A 65 year old man has started chemotherapy for lymphoma. He has developed a painful, swollen, hot right knee. He is apyrexial.

3  A 75 year old man has had painful knees for many years but his left knee has become acutely hot & swollen with no history of trauma.

4  A 70 year old woman has pain & stiffness of her shoulders & hips. She finds it difficult to comb her hair in the morning but is less stiff by the end of the day.

5  A 25 year old man with severe Crohn’s disease suddenly developed a painful swollen knee & cannot put weight through it. He is febrile

DBCGI
Investigation of Amenorrhoea/Infertility

A  Menopause
B  Polycystic ovary syndrome
C  Hypothyroidism
D  Prolactinoma
E  Premature ovarian failure
F  Anorexia nervosa
G  Hypopituitarism
H  Hyperthyroidism
I  Pregnancy
J  Turner’s syndrome
K  Addison’s disease

For each set of results below choose the SINGLE most likely underlying cause for amenorrhoea or infertility from the above list of options. Each option may be used once, more than once or not at all.

1  A 45 year old woman with 3 months amenorrhoea preceded by 6 months irregular periods. Beta-HCG positive. Normal LH & FSH, raised prolactin, normal testosterone. Raised TSH & thyroxine.


4  A 20 year old woman with weight loss & amenorrhoea for 2 years. Beta-HCG negative. Low LH & FSH, normal prolactin & testosterone.

5  A 26 year old obese, hirsute woman with irregular periods & infertility. Beta-HCG negative. Moderately raised LH, normal FSH, normal prolactin & slightly raised testosterone.

6  A 45 year old woman with 3 months amenorrhoea preceded by 6 months irregular periods. Beta-HCG negative. High LH & FSH, normal prolactin & testosterone.
Investigation of Anaemia

A  Pernicious anaemia
B  Folic acid deficiency
C  Iron deficiency
D  Coeliac disease
E  Alpha thalassaemia
F  Beta thalassaemia major
G  Autoimmune haemolytic anaemia
H  Sickle cell disease
I  Sickle cell trait
J  Aplastic anaemia
K  Acute myeloid leukaemia
L  Myelodysplastic syndrome

For each set of test results below choose the SINGLE most likely cause of anaemia from the above list of options. Each option may be used once, more than once or not at all.

1  A 50 year old man; Hb 7g/dl, WBC 46x10^9, platelets 21x10^12, blood film – myelocytes, promyelocytes & myeloblasts.

2  A 45 year old woman; Hb 8.1g/dl, WBC 3.1x10^9, platelets 19x10^12, MCV 107fl, blood film – hypersegmented neutrophils, no blasts.

3  A 30 year old woman; Hb 6.1g/dl, WBC 7.2x10^9, platelets 170x10^12, blood film – polychromasia, target cells. Direct antiglobulin test – positive.

4  A 20 year old woman, Hb 6.2g/dl, WBC 8.8x10^9, platelets 230x10^12, MCV 71fl, Hb electrophoresis – HbA 98%, HbA2 2%.

5  A 20 year old man; Hb 7.1g/dl, WBC 10.2x10^9, platelets 510x10^12, blood film – abnormal red cells, nucleated red cells & reticulocytes.

6  A 20 year old man; Hb 5.9g/dl, WBC 2.1x10^9, platelets 9x10^12, MCV 85.2fl, blood film – reductions of all cell types. No reticulocytes or blasts.

KAGCFJ
Investigation of Black Toes

A  Arteriogram
B  Venous duplex scan
C  Anti-neutrophil cytoplasmic antibody
D  Blood cultures
E  Lumbar puncture
F  Full blood count
G  Blood sugar
H  CT scan of abdomen
I  Cold provocation test

For each patient below, choose the SINGLE most appropriate investigation from the above list of options. Each option may be used once, more than once or not at all.

1  An 80 year old man presents with several painless black patches on his toes. He has also been suffering from constant back pain for 2 weeks.

2  A 35 year old woman arrives on a plane from Melbourne with a swollen right leg. 2 days later her leg is even more swollen & her toes have gone black.

3  A 25 year old university student presents with high fevers. He has a petechial rash, black areas on his digits & a blood pressure of 70/50.

4  A 55 year old woman presents with painful joints, a purpuric rash on her arms & legs & haemoptysis. She has black patches on her toes.

5  An 80 year old man with diabetes presents with black right great & second toes. He also has an ulcer on the ball of the foot.
Investigation of Cause of Clubbing

A  Abdominal ultrasound scan  
B  Bronchoscopy  
C  Colonoscopy  
D  Chest x-ray  
E  Echocardiogram  
F  Lung function tests  
G  Sputum culture  
H  Stool culture  

For each question below, choose the SINGLE most likely investigation from the above list of options. Each option may be used once, more than once or not at all.

1  A 45 year old man with a long history of excess alcohol consumption presents with haematemesis. On examination he is clubbed & has spider naevi.

2  A 45 year old man with a history of occupational exposure in building & demolition industry presents with shortness of breath. On examination clubbing & signs of peripheral effusion.

3  A 19 year old woman with a past history of cardiac surgery in infancy presents with symptoms of decreasing exercise tolerance. On examination there is cyanosis & clubbing.

4  A 35 year old woman with history of recurrent lower abdominal pain, bloody diarrhoea & passing mucus PR. On examination there is lower abdominal tenderness & clubbing.

5  A 50 year old woman who is a heavy smoker presents with shortness of breath & weight loss. On examination she is clubbed. The chest x-ray shows a perihilar shadow.

ADECB
Investigation of Chest Pain

A  ECG
B  Exercise ECG
C  Transthoracic echo
D  Chest x-ray
E  Chest x-ray in expiration
F  Chest x-ray rib views
G  Dorsal spine x-rays
H  Barium swallow
I  Upper GI endoscopy
J  V/Q scan
K  CT scan chest
L  CPK (creatinine phosphokinase)
M  Coronary angiogram

For each patient below, choose the SINGLE most useful investigation from the above list of options. Each option may be used once, more than once or not at all.

1  An 80 year old man with a history of ischaemic heart disease tripped over a paving stone & fractures his hip. An ambulance takes him to A&E. 1 hour after arrival, he develops crushing central chest pain.

2  A 19 year old male medical student develops acute chest pain during a game of squash. On examination he is distressed but there are no abnormal findings on examining his chest.

3  A 55 year old female complains of a 6 month history of chest pain which radiated to the jaw & both shoulders. The pain is reported to be more severe at night. ECG & chest x-rays are normal.

4  A 30 year old male alcoholic presents to casualty with pain radiating from his back around the left side of his chest wall. The pain catches with inspiration & is associated with a feeling of breathlessness. On examination there is a localised pleural rub & exquisite tenderness on palpation of the lower chest wall. Chest x-ray is unremarkable.

5  An 80 year old woman develops acute chest pain. It is posteriorly sited, radiating anteriorly under the breast. Cardiovascular & respiratory examination is normal. Chest x-ray & ECG are both normal.
Investigation of Chest Pain

A  ECG  
B  Exercise ECG  
C  Coronary angiogram  
D  Thallium perfusion scan  
E  Chest x-ray  
F  Ventilation/perfusion scan  
G  CT chest  
H  Upper GI endoscopy  
I  Abdominal ultrasound  
J  Creatine kinase  
K  Arterial blood gases  
L  Sputum culture  
M  Liver function tests  
N  Lower limb venogram

For each of the following patients choose the SINGLE most discriminatory investigation from the above list of options. Each option may be used once, more than once or not at all.

1  A 50 year old male smoker describes episodes of dull central chest pain on exertion lasting 10 minutes & relieved by rest.

2  A 60 year old man who is waiting to have a knee replacement, describes daily episodes of central chest pain when he gets up in the morning. The pain lasts 15 minutes & settles with rest.

3  A 25 year old woman, who has recently started taking the combined oral contraceptive, developed sudden severe pleuritic pain & mild breathlessness. Her left leg was swollen yesterday, but not today.

4  A 30 year old man has had a 12 hour history of central chest pain, relieved by sitting forwards. He recently had a sore throat.
Investigation of Confusion

A  Blood cultures  
B  Blood glucose  
C  Chest x-ray  
D  Computed tomography (CT) scan of head  
E  Electrocardiogram (ECG)  
F  Full blood count (FBC)  
G  Mid-stream specimen of urine  
H  Stool culture  
I  Thyroid function tests  
J  Ultrasound abdomen  
K  Urea & electrolytes  

For each presentation below, choose the SINGLE most discriminating investigation from the above list of options. Each option may be used once, more than once or not at all.

1  An 84 year old woman in a nursing home has been constipated for a week. Over the past few days she has become increasingly confused & incontinent.

2  A previously well 78 year old woman has been noticed by her daughter to be increasingly slow & forgetful over several months. She has gained weight & tends to stay indoors with the heating on even in warm weather.

3  A 64 year old man has recently been started on tablets by his GP. He is brought to the Accident & Emergency Department by his wife with sudden onset of aggressive behaviour, confusion & drowsiness. Prior to starting the tablets he was losing weight & complaining of thirst.

4  A frail 85 year old woman presents with poor mobility & a recent history of falls. She has deteriorated generally over the past 2 weeks with fluctuating confusion. On examination she has a mild right hemiparesis.

5  A 75 year old man with known mild Alzheimer’s disease became suddenly more confused yesterday. When seen in the Accident & Emergency Department, his blood pressure was 90/60 & his pulse rate was 40/min & regular.
Investigation of Endocrine Disease

A  Dexamethasone suppression test
B  ACTH (Synacthen) stimulation test
C  Fasting blood glucose
D  Serum aldosterone
E  Urinary ketones
F  T3, T4 & TSH levels
G  HbA1c levels
H  Water deprivation test
I  Liver function tests
J  Abdominal ultrasound

For each of the patients described below choose the most likely investigation from the above list of options. Each option may be used once, more than once or not at all.

1  A 12 year old boy presents with 4 weeks of weight loss, polyuria & polydipsia.

2  A 44 year old woman presents with tachycardia, atrial fibrillation, double vision & swelling above her ankles. She has lid lag on examination.

3  A 42 year old man has hypertension, hyperglycaemia, myopathy, thinning of skin, buffalo hump & truncal obesity.

4  An 18 year old girl complains of her appearance. She is much too fat, she says. She also complains of missed periods & hairiness. On physical examination you find her to be 10kg overweight.

5  A 34 year old man presents with insidious onset weakness & weight loss. On examination, he has hyperpigmentation of the palmar creases & postural hypotension.
# Investigation of Fever

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>Clinical exam only</td>
</tr>
<tr>
<td>B</td>
<td>Full blood count</td>
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<tr>
<td>C</td>
<td>Chest x-ray &amp; sputum cultures</td>
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<tr>
<td>D</td>
<td>Echocardiogram</td>
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<td>E</td>
<td>Thick blood film</td>
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<td>F</td>
<td>Lumbar puncture</td>
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<tr>
<td>G</td>
<td>Urine microscopy &amp; culture</td>
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<td>H</td>
<td>Liver function tests</td>
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<tr>
<td>I</td>
<td>CT brain scan</td>
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<tr>
<td>J</td>
<td>Abdominal ultrasound</td>
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<td>K</td>
<td>Blood cultures</td>
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<td>L</td>
<td>Throat swabs</td>
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<td>M</td>
<td>IVP</td>
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</table>

For each of the patients below, choose the SINGLE investigation, most likely to confirm the diagnosis, from the above list of options. Each option may be used once, more than once or not at all.

1. A 22 year old female medical student returned from elective in Nigeria 3 months ago, she has had a fever & night sweats for 3 weeks.

2. A 23 year old man has been living rough in London since being made homeless 6 months ago. He presents in A&E, unwell with 1 month history of cough, weight loss, fever & night sweats.

3. An 18 year old student started university 3 months ago. She has felt flu-like for 2 days. In the last 2 hours she has developed a severe headache, vomiting, temp of 39\(^\circ\)C & photophobia. On examination she has neck stiffness & a positive Kernig’s sign.

4. 5 days after a bowel resection for cancer, a 70 year old man gets a swinging fever & becomes confused.

ECFK
Investigation of Hypercalcaemia

A  Primary hyperparathyroidism
B  Secondary hyperparathyroidism
C  Tertiary hyperparathyroidism
D  Hypoparathyroidism
E  Metastatic prostate cancer
F  Metastatic breast cancer
G  Multiple myeloma
H  Hyperthyroidism
I  Paget’s disease of the bone
J  Sarcoidosis
K  Thiazide diuretics

For each set of results below, choose the SINGLE most likely underlying cause for hypercalcaemia from the above list of options. Each option may be used once, more than once or not at all. All calcium levels are corrected for albumin.

1  A 55 year old woman found to have the following results on a routine screen: Calcium 2.85mmol/l, phosphate 0.8mmol/l, alkaline phosphatase 110iu/l, PTH 5.8 (NR 1.3-6.8), 25-OH vitamin D 12 (NR 10-50).

2  A 25 year old woman with breathless. Calcium 2.9mmol/l, phosphate 0.9mmol/l, alkaline phosphatase 70iu/l, PTH 1.3, 25-OH vitamin D 16, 1,25-OH vitamin D 112 (NR 60-100).

3  A 35 year old woman with bone pain, drowsiness & thirst. Calcium 3.3mmol/l, phosphate 0.75mmol/l, alkaline phosphatase 190iu/l, PTH 1.1, PTH activity high, glucose 6mmol/l.

4  A 70 year old woman who has recently become wheelchair bound due to hip pain. Calcium 2.95mmol/l, phosphate 0.9mmol/l, alkaline phosphatase 750iu/l, PTH 3.3, 25-OH vitamin D 30.

5  A 66 year old man with low back pain. Calcium 3.1mmol/l, phosphate 0.7mmol/l, alkaline phosphatase 120iu/l, acid phosphatase 310iu/l, haemoglobin 9.0g/dl.

6  A 60 year old man with back pain. Calcium 3.0mmol/l, phosphate 0.6mmol/l, alkaline phosphatase 120iu/l, albumin 28g/l, total protein 91g/l, haemoglobin 9.0g/dl.
Investigation of Intermittent Loss of Consciousness

A  CT brain
B  EEG
C  ECG
D  24 hour Holter monitor
E  Exercise ECG
F  Tilt test
G  Carotid sinus massage
H  Echocardiogram
I  Carotid doppler
J  Prolonged fasting blood sugar

For each of the following patients choose the SINGLE most discriminatory investigation from the above list of options. Each option may be used once, more than once or not at all.

1  A 50 year old man with type I diabetes feels light headed on standing. He has had 4 episodes of collapse with transient loss of consciousness after standing up. BP is 180/70 lying & 140/60 standing.

2  A 60 year old man has had 3 episodes of loss of consciousness without warning. A witness said that he went very pale as he collapsed, but then became flushed & regained consciousness after 30 seconds. He vomited after each collapse. Resting pulse 60 beats/min.

3  A 60 year old woman has recently started attending an exercise class. She has collapsed whilst exercising on 3 occasions & has also experienced chest pain during exercise. Pulse 60/min, BP 100/80.

4  A 35 year old woman has a 20 year history of infrequent episodes where she feels nauseated, with a rising feeling in her epigastrium & chest, 20 seconds later she collapses & is unconscious for up to a minute. During this she wrings her hands but is not incontinent & has never injured herself. Afterwards she feels tired for about 2 hours.

5  A 65 year old man has had 3 collapses in the last week. He has no warning & sustained a black eye in the last one. He feels giddy all the time. Resting pulse is 40 beats/min.

GDEBF
Investigation of Jaundice

A  Gallstones
B  Alcoholic cirrhosis
C  Hepatitis
D  Weil’s disease
E  Haemolysis
F  Gilbert’s syndrome
G  Carcinoma of the head of the pancreas
H  Cholangiocarcinoma of the ampulla
I  Dubin-Johnson syndrome
J  Drug-induced cholestasis
K  Hepatocellular carcinoma
L  Acute pancreatitis

For each set of test results below choose the SINGLE most likely cause of jaundice from the above list of options. Each option may be used once, more than once or not at all.

1  A 50 year old man: Bilirubin 50umol/l, Alkaline phosphatase 200iu/l, Alanine aminotransferase 120iu/l, Gamma-glutamyl transpeptidase 600iu/l.

2  A 50 year old man: Bilirubin 110umol/l, Alkaline phosphatase 300iu/l, Alanine aminotransferase 110iu/l, Alpha-fetoprotein 260iu/l.


4  A 20 year old man: Bilirubin 45umol/l, (Conjugated 7, unconjugated 38), Alkaline phosphatase 40iu/l, Alanine aminotransferase 12iu/l, Haemoaglobin 15g/dl, Blood film reported as normal.

BKAFL
## Investigation of Malabsorption

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<table>
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<tbody>
<tr>
<td>A</td>
<td>Sweat test</td>
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<td>B</td>
<td>ERCP</td>
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<td>C</td>
<td>Abdominal ultrasound</td>
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<td>D</td>
<td>Abdominal x-ray</td>
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<td>E</td>
<td>Jejunal biopsy</td>
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<td>F</td>
<td>Barium follow through</td>
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<td>G</td>
<td>Endomysial antibodies</td>
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<td>H</td>
<td>Thyroid function</td>
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<td>I</td>
<td>Faecal fat collection</td>
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<td>J</td>
<td>Immunoglobulin</td>
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<td>K</td>
<td>Hydrogen breath test</td>
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<td>L</td>
<td>HIV test</td>
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</tbody>
</table>

For each of the following patients choose the SINGLE most useful investigation from the above list of options. Each option may be used once, more than once or not at all.

1. A 50 year old woman has developed weight loss & passes loose pale stools. She has mouth ulcers & is anaemic. She takes thyroxine for myxoedema.

2. A 35 year old man presents with weight loss, diarrhoea & pain on swallowing. On examination, he has oral candidiasis & molluscum contagiosum.

3. A 10 year old girl with a history of recurrent chest infections has developed pale floating stools & weight loss.

4. A 45 year old man has recurrent abdominal pain, weight loss & diarrhoea. He has a previous history of alcoholism.

5. A 20 year old man has a 4 month history of diarrhoea & weight loss. He is pale & has mouth ulcers & clubbing.

6. A 40 year old man has previously had a small bowel resection. He now has symptoms of malabsorption & barium investigations are inconclusive.
Investigation of Oedema

A  Liver function tests
B  24 hour urinary protein
C  Urea & electrolytes
D  Full blood count
E  Pelvic ultrasound
F  Venous duplex scan
G  Creatinine clearance
H  Electrocardiogram
I  Chest x-ray
J  Drug history
K  Echocardiogram
L  Lymph node biopsy
M  Blood film examination

For each patient below, choose the SINGLE most appropriate investigation from the above list of options. Each option may be used once, more than once or not at all.

1  A 20 year old male with generalised oedema. He has noticed ‘frothy’ urine recently. Liver function tests show plasma albumin of 15g/l.

2  A 60 year old woman complained of a painful swollen left leg on arrival at Heathrow airport. On examination her leg is tender with shiny skin. She was taking hormone replacement therapy.

3  A 45 year old publican developed bilateral limb oedema & noticed that his trousers were becoming tight. On examination he had gynaecomastia & Duputyren’s contractures.

4  A 60 year old female with uncontrolled hypertension, whose medication has been recently changed by her GP presents with bilateral ankle swelling. Clinical examination of her chest & cardiovascular system were normal.

5  A 70 year old woman with swelling of her right leg. She gives a history of recent weight loss & lower abdominal discomfort. Examination shows pitting oedema of the entire leg & a possible right sided pelvic mass.

6  A 60 year old man who is a heavy smoker presents with a longstanding history of cough & breathlessness. He has recently noticed increasing difficulty in walking due to leg swelling. On examination he is centrally cyanosed & has bilateral wheezes on chest auscultation.

BFAJEI
Investigation of Oedema

A  Coagulation screen  
B  Full blood count  
C  Liver function tests  
D  24 hour urine protein  
E  Plasma creatinine  
F  Venous doppler studies  
G  Arterial doppler studies  
H  Lymphangiogram  
I  Pelvic ultrasound  
J  Chest x-ray

For each scenario below, choose the SINGLE most useful investigations from the above list of options. Each option may be used once, more than once or not at all.

1  82 year old man with hypertension for many years. He presents with increasing shortness of breath particularly when lying flat, & ankle swelling. On examination JVP is raised, BP 140/60, pulse 120/minute in atrial fibrillation.

2  54 year old Asian woman with type 2 diabetes for 15 years. She comes to the clinic complaining of ankle swelling. On examination, BP 170/95, JVP not raised & bilateral oedema to the knees.

3  65 year old woman with weight loss, malaise & ankle swelling. She smokes 20 cigarettes/day. There is a past history of irritable bowel syndrome. On examination; pulse 80/min irregularly irregular, JVP not seen, BP 135/85, clear chest, bilateral oedema & large mass in pelvis. Urine testing reveals protein +.

4  73 year old man was reviewed in the diabetic clinic. He was complaining of increasing tiredness & loss of appetite. His ankles had become more swollen over the last few weeks.

5  66 year old man presents with swelling of his right leg to the knee. He had had a right hip replacement 5 weeks previously.
Investigation of the Febrile Child

A  Blood culture  
B  Urine culture  
C  Chest x-ray  
D  Throat swab  
E  Stool culture  
F  Stool electron microscopy  
G  Lumbar puncture  
H  CT brain  
I  Culture of joint aspirate  
J  ESR  
K  C-reactive protein  
L  EEG

For each of the following patients choose the SINGLE most discriminating investigation in the acute management from the above list of options. Each option may be used once, more than once or not at all.

1  A 3 year old girl is febrile & has been unwell for 12 hours. She complains of a headache & is drowsy but otherwise neurologically intact.

2  A 2 month old child has had a fever & cough for 3 days. He is tachypnoeic with grunting & has nasal flaring.

3  A 3 year old has had a high fever & sore throat for 2 days. This evening he had a generalised convulsion lasting 2 minutes. He is now drowsy but rousable with no localising signs.

4  An 8 year old has developed a painful, swollen knee over the last day. On examination, there is a tender, warm effusion of the left knee. She also has a pyrexia of 38°C.

5  A 12 month old boy has a 24 hour history of profuse diarrhoea & irritability. He has a low grade fever.

GCDIE
Investigations for Infectious Diseases

A  Lyme disease serology
B  MRI hand
C  Hepatitis A serology
D  Hepatitis B serology
E  Viral antibodies
F  Blood film for malaria
G  Wound swab test
H  Skin prick test
I  Leptospirosis serology
J  Nail & skin scrapings

For each patient choose from the list above the most appropriate investigation.

1  A 14 year old girl comes with a rash on thigh with central fading. She has a history of holiday in a forested area.

2  A business man comes from Zambia with a 10 day history of rigors, fever & headache.

3  A 42 year old surfer presents with fever & jaundice.

4  A police officer is bitten by a heroine addict he catches. He presents with a deep wound on his hand at A&E.

5  A 60 year old diabetic presents with discoloured toe nails.

AFIGJ
Jaundice

A  Alcoholic hepatitis  
B  Paracetamol overdose  
C  Hepatitis B  
D  Ibuprofen overdose  
E  Hereditary haemochromatosis  
F  Wilson’s disease  
G  Perforated peptic ulcer  
H  Acute pancreatitis  
I  Acute cholecystitis  
J  Weil’s disease  
K  Trauma

For each of these jaundiced patients, choose the most likely diagnosis from the list of options above.

1  A 35 year old woman presents to A&E with jaundice & fever. She is a prostitute & a heroin addict. On examination she is found to have hepatomegaly, arthralgic pain in her hands, & generalised urticaria. She says that she doesn’t drink alcohol.

2  A 2 year old boy is brought into A&E by his mother. He appears jaundiced, drowsy & confused. His mother reports that he had vomited repeatedly the previous day, & she thinks that he may have eaten some tablets.

3  A 57 year old factory worker presents with vomiting & central abdominal pain, which radiates to his back. On examination he is tachycardic, sweating & jaundiced, with a rigid & tender abdomen. He confesses to being a heavy drinker.

4  A 40 year old prison officer complains of tiredness & pain in his knuckles & left knee. On examination, he appears jaundiced & has signs of hepatomegaly, clubbing, palmar erythema, spider naevi & testicular atrophy. The patient reports a family history of jaundice, diabetes & joint pain. He drinks around 20 units of alcohol each week.

5  An obese 38 year old woman complains of vomiting & continuous RUQ abdominal pain. On examination she is sweating, & when 2 fingers are placed over the RUQ, the pain becomes worse as the patient breathes in. There is no pain in the LUQ. She admits to having recently spent 3 hours in an all-you-can-eat Indian buffet.
# Jaundice

<table>
<thead>
<tr>
<th></th>
<th>Diagnosis</th>
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<tbody>
<tr>
<td>A</td>
<td>Carcinoma of the pancreas</td>
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<tr>
<td>B</td>
<td>Gilbert’s syndrome</td>
</tr>
<tr>
<td>C</td>
<td>Hepatitis</td>
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<tr>
<td>D</td>
<td>Dubin-Johnson syndrome</td>
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<tr>
<td>E</td>
<td>Primary biliary cirrhosis</td>
</tr>
<tr>
<td>F</td>
<td>Primary sclerosing cholangitis</td>
</tr>
<tr>
<td>G</td>
<td>Haemolytic anaemia</td>
</tr>
<tr>
<td>H</td>
<td>Gallstones</td>
</tr>
</tbody>
</table>

Match the patient description with one of the above diagnoses

1. A 50 year old housewife presents with pruritus, jaundice with pale stools, dark urine & steatorrhoea, pigmentation & xanthelasma. On examination her liver & spleen are palpable. Antimitochondrial antibodies are present.

2. A 25 year old man presents to you with due to an incidental finding of a slightly raised bilirubin of 31umol on a routine check. No other signs of liver disease are present. Investigations show a raised unconjugated bilirubin. He mentions that others in his family have suffered from jaundice.

3. A 65 year old ex smoker is deeply jaundiced. He has epigastric pain radiating to his back. A dilated gall bladder is palpable & there is hepatomegaly. He has lost about 5kg in weight.

4. A 22 year old man comes to see you on his return from a holiday in Spain. He has a 3-4 day history of fever, malaise, nausea, vomiting & abdominal discomfort. He presents with jaundice & has dark urine with pale stools. There is some tender enlargement of the liver.

5. A 6 year old presents with mild jaundice (pale lemon coloured skin) & some pain & swelling in his fingers. On examination you note splenomegaly.
Joint Pain

A  Paget’s disease of bone
B  Myositis ossificans
C  Ruptured Achilles tendon
D  Osteosarcoma
E  Osteoarthritis
F  RA
G  Carpal tunnel syndrome
H  Ruptured extensor pollicus longus
I  Torn posterior cruciate ligament
J  Torn anterior cruciate ligament

Which of the above is the most likely cause of the joint pain?

1. A 12 year old boy had been playing Frisbee in the park with his friends 2 weeks ago when he tripped over & hurt his knee. He is complaining of a persistent aching & throbbing pain. On questioning he said he has been losing weight over the past 3 months & is generally unwell, feeling tired all of the time. There is wasting of the quadiceps muscle & the knee is slightly swollen.

2. A 19 year old football player, whilst playing in a local league cup final, slides in for a tackle but as he does so the knee twists as it is fully extended & he hears a “pop” sound. He is instantly in agony & the knee joint becomes very swollen.

3. A 75 year old woman has been complaining of increasing back pain over the previous 6 months. She comments upon the fact that the hat she wore to ladies day last year at Ascot no longer fits her, she has frequent headaches, & she no longer has the acuity of hearing she once did. On examination she has bowing of the legs & an even curvature of the spine.

4. An overweight 65 year old woman has been complaining of very gradually increasing pain in her hands over the past 5 years. She has recently felt that her joints were becoming stiffer & it was increasingly difficult for her to hold ordinary everyday items such as a kettle. She has recently noticed she is getting pain in her knee as well.

5. A 45 year old diabetic woman has been finding it difficult to hold onto small diamonds at her work as a jewellery maker. She is complaining of pins & needles in her fingers, principally her index & middle fingers of her right hand, which is exacerbated at night. She has an aching pain in her forearm.
Laboratory Tests

A  Creatinine kinase
B  Diabetes mellitus
C  Ulcerative colitis
D  Serum ZPP
E  Serum HCG
F  Multiple myeloma
G  Alanine-amino transferase (ALT)
H  Nephrotic syndrome
J  Gamma-glutamyl transpeptidase
K  Alkaline phophatase
L  Serum CEA
M  Prostatic cancer
N  Alpha-fetoprotein
O  Serum amylase

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1  In this condition serum albumin is low.
2  CRP (C-reactive protein) level is elevated in this condition.
3  Microalbuminuria is indicative of end organ damage in this condition.
4  This light chain protein, detected by serum electrophoresis is present in some patients with this condition.
5  Serum Acid Phosphatase can be a useful marker of disease activity in this condition.
6  This can be a diagnostic test in acute pancreatitis.
7  This enzyme is elevated in any condition which results in liver cell damage.
8  This enzyme is elevated immediately after a heart attack.
9  This enzyme is elevated in patients who drink excessive amounts of alcohol.
10  This is a useful test in the diagnosis of liver cancer.
11  This is a diagnostic test in patients with choriocarcinoma.
12  This is a useful test following the progression of a gastrointestinal cancer.

HCBFMOGAJNEL
Leukaemias & lymphomas

A  Acute myeloid leukaemia
B  Acute lymphoblastic leukaemia
C  Chronic myeloid leukaemia
D  Hodgkin’s disease
E  Non-hodgkin’s lymphoma
F  Multiple myeloma
G  Polycythaemia rubra vera
H  Eosinophilic leukaemia
I  Chronic lymphocytic leukaemia
J  Essential thrombocythaemia

For each abnormality choose the diagnosis that matches most closely. Each diagnosis may be used once, more than once or not at all.

1  Philadelphia chromosome
2  Reed-Sternberg cell
3  Increase of monoclonal plasma cells in the bone marrow
4  Bone marrow replaced by myeloblasts
5  Urinary Bence-Jones protein
Liver Pathology

A  Cirrhosis
B  Mallory weiss tear of oesophagus
C  Hepatitis B virus infection
D  Hepatitis C virus infection
E  Portal hypertension
F  Extensive necrosis
G  Portal chronic inflammation
H  Hepatocellular carcinoma
I  Cholecystitis

Match the description of the patient with the most likely diagnosis

1  A 25 year old female with recent onset of depression takes 50 capsules, 500mg each of paracetamol tablets. In several days, the liver is most likely to show

2  A 40 year old male has a long history of chronic alcoholism. His liver is firm on palpation. An abdominal CT scan reveals that the liver has changes consistent with cirrhosis. He joins Alcoholics Anonymous & stops drinking. Despite his continued abstinence from alcohol, he remains at risk for development of which disease?

3  A 40 year old female, rather overweight, has episodes of right upper quadrant pain. Following an operation the surgical specimen removed will show on histology evidence of

FHI
Lumps in the Groin

A  Abscess
B  Aneurysm
C  Haematoma
D  Folliculitis
E  Inguinal hernia
F  Lipoma
G  Lymphoma
H  Reactive lymph node
I  Sebaceous cyst
J  Strangulated femoral hernia

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 28 year old builder has an intermittent lump in the left groin for 6 weeks. It is painless. On examination it is above the inguinal ligament, can be induced by coughing, is reducible & is non-tender.

2  40 year old woman with fever, weight loss & malaise for 2 months. She has had 2 courses of antibiotics from her GP for presumed chest infections. On examination there is a rubbery 2cm diameter lump in the right groin & 1.5cm diameter lump in the left groin. They are not tender.

3  66 year old woman with right leg ulcer dressed by district nurse for 2 months. On examination there is a tender warm lump in the right groin.

4  72 year old woman with 2 day history of painful lump in left groin. On examination there is an exquisitely tender 3cm mass in groin.

5  62 year old man with enlarging pulsatile mass in left groin. 3 days previously he had had a coronary angiogram.

EGHJB

ABSCESSES HAVE TO BE <1cm by definition
Lumps in the Neck

A  Reassure & explain why no active management necessary
B  Full blood count & Paul Bunnell
C  Excise for biopsy
D  Thyroxine
E  Upper GI endoscopy
F  Technetium thyroid scan
G  Carbimazole
H  Sialogram
I  Amoxycillin

From the list given above, what is the most appropriate management option for the following patients?

1  45 year old man with a 6 week history of intermittent tender swelling that occurs below the left side of his jaw often during meals but can occur even if he thinks of food. It disappears overnight. You find a 3 by 2cms firm mass with no other abnormal findings.

2  A 25 year old woman who complains of heat intolerance, anxiety & weight loss, despite a good appetite. You find a fine tremor in her hands & a pulse of 120. There is a smooth swelling, 5cms by 3cms, centred on the midline of her neck. You hear a bruit when you place the stethoscope diaphragm over it.

3  A woman of 20 with a week’s history of sore throat & fever. You find large smooth tender sub-mandibular bilateral lymph glands.

4  80 year old woman who complains of palpitations, intolerance to heat, diarrhoea & weight loss. You find a firm 1cm lump just right of the mid-line in her neck that moves up & down when the patient swallows.

5  55 year old woman who complains of dysphagia is found to have a 10cms in width & 5cms in height bilateral symmetrical non-tender nodular mass in the front of her neck. Investigations show that she is euthyroid.

HGBFC
Management of Acute Breathlessness

A  Nebulised salbutamol
B  Pleural aspiration
C  Chest drain
D  Rapid infusion of saline
E  Intramuscular adrenaline
F  Intravenous adrenaline
G  Heparin
H  Intravenous aminophylline
I  Heimlich manoeuvre
J  Intravenous furosemide
K  Forced alkaline diuresis
L  Intravenous insulin
M  Re-breathing into paper bag

For each patient below, choose the SINGLE most important step in the acute management from the above list of options. You should assume that all patients have received oxygen at the appropriate flow rate. Each option may be used once, more than once or not at all.

1. A 50 year old man became suddenly breathless whilst eating. He has marked stridor & is choking & drooling.

2. A 60 year old male presents with acute breathlessness & a cough productive of frothy, pink sputum. He cannot lie flat. On examination, he has crackles to both midzones & a few scattered wheezes.

3. A 20 year old woman is too breathless to speak. Her pulse is 120/min, respiratory rate 30 per min & peak expiratory flow is 100l/min. Examination reveals a very quiet chest & chest x-ray is normal.

4. A 25 year old woman has just returned from a holiday in Kenya. She suddenly became breathless & is cyanosed. Her pulse is 120/min, BP 110/70, peak expiratory flow 400l/min. Chest x-ray is normal.

5. A 50 year old with pulmonary fibrosis develops sudden left-sided pleuritic pain & dyspnoea. He has reduced air entry in the left side of the chest & percussion is hyper-resonant. Oxygen saturation is 80%.
Management of Acute Venous Thromboembolism

A  Observation in hospital
B  Reassure & discharge
C  Subcutaneous low molecular weight heparin
D  Check INR & continue warfarin
E  Antiembolism stocking
F  Vena cava filter
G  Embolectomy
H  Intravenous heparin
I  Heparin plus warfarin
J  Start warfarin therapy

For each patient below, choose the SINGLE most likely appropriate management from the above list of options. Each option may be used once, more than once or not at all.

1. A 25 year old woman returning from Australia presents with acutely painful left calf. Ultrasound confirms deep vein thrombosis extending above the popliteal veins. She has recently missed a period.

2. A 30 year old man developed acute pain in the right calf after a game of squash. He has marked calf tenderness but no swelling. Doppler ultrasound is negative.

3. A 50 year old lady taking NSAIDs for arthritis presented with a history of sudden onset pain behind her right knee leading to pain down the calf. Ultrasound confirms a Baker’s cyst.

4. You are asked to see a patient with acute chest pain 5 days after total hip replacement. ECG & CXR are suspicious for pulmonary embolism but imaging is not immediately available as it is a weekend.

5. A lady who is on warfarin for a confirmed right calf DVT develops increasing pain & swelling of that leg. Repeat imaging shows thrombus limited to the calf.
Management of Acute Venous Thromboembolism

A  Observation only
B  Reassure & discharge
C  Subcutaneous low molecular weight heparin
D  Warfarin alone
E  Antiembolism stocking
F  Vena cava filter
G  Embolectomy
H  Intravenous heparin
I  Heparin plus warfarin

For each patient below, choose the SINGLE most likely appropriate management from the above list of options. Each option may be used once, more than once or not at all.

1  A 25 year old woman returning from Australia presents with an acutely painful left calf. Ultrasound confirms deep vein thrombosis extending above the popliteal veins. She has recently missed a period.

2  A 30 year old man developed acute pain in the right calf after a game of squash. He has marked calf tenderness but no swelling. Doppler ultrasound is negative.

3  A 50 year old lady taking non-steroidal anti-inflammatory drugs for arthritis presented with a history of sudden onset pain behind her right knee leading to pain down the calf. Ultrasound confirms a Baker’s cyst.

4  You are asked to see a patient with acute chest pain 5 days after a total hip replacement. ECG & CXR are suspicious for a pulmonary embolism but imaging is not immediately available as it is a weekend.

5  A lady who is on warfarin for a confirmed right calf DVT develops increasing pain & swelling of that leg. Repeat imaging suggests an extension of her thrombosis.
Management of Breathlessness

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
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<tbody>
<tr>
<td>A</td>
<td>Beta agonist via metered dose inhaler</td>
</tr>
<tr>
<td>B</td>
<td>Beta agonist via nebuliser</td>
</tr>
<tr>
<td>C</td>
<td>Long acting beta agonist</td>
</tr>
<tr>
<td>D</td>
<td>Intravenous aminophylline</td>
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<td>E</td>
<td>Intravenous hydrocortisone</td>
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<tr>
<td>F</td>
<td>Oral prednisolone</td>
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<tr>
<td>G</td>
<td>Intramuscular adrenaline</td>
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<td>H</td>
<td>24% continuous oxygen</td>
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<tr>
<td>I</td>
<td>40% continuous oxygen</td>
</tr>
<tr>
<td>J</td>
<td>Antibiotic reserve</td>
</tr>
<tr>
<td>K</td>
<td>Amoxycillin intravenously</td>
</tr>
<tr>
<td>L</td>
<td>Influenza immunisation</td>
</tr>
</tbody>
</table>

For each situation below, choose the SINGLE most likely/appropriate treatment from the list of options above. Each option may be used once, more than once or not at all.

1. A young 23 year old allergic atopic asthmatic woman becomes acutely breathless. She has just taken an Aspirin for headache. Her neck is swollen, eyes puffy, & her breathing is noisy, with marked wheeze throughout the lung fields.

2. A 70 year old man with longstanding COPD has just recovered from another exacerbation. He needs measures to help him remain at home. He is on maximum oral & inhaler therapy & has irreversible airflow obstruction. What additional medication or preventative measure could be arranged at discharge from hospital?

3. A 64 year old man has become acutely breathless over the last 4 days, with a productive cough, green sputum & chest tightness. He is a longstanding smoker. Clinically he is hypoxic, with tachycardia, tachypnoea, & central cyanosis. His ABG are as follows: pH 7.35, PaO\textsubscript{2} 6.7kPa, PaCO\textsubscript{2} 7.8kPa. He has been given nebulised bronchodilators & intravenous antibiotics & steroids.

4. A 35 year old man with known asthma who takes high dose inhaled steroids has been using his salbutamol inhaler 8-9 times a day over the last month. He has nocturnal cough & a tight chest early in the morning. There are no signs of infection & his environment hasn’t changed. He is a non-smoker & is allergic to house dust mite. He is physically active ie his peak flow diary shows peak flow of around 85% of expected. What would be the next step in the management of this patient?

5. A 16 year old girl attends her GP surgery as an emergency with wheezing, difficulty in breathing & cough. Her PEFR is 250l/min, expected PEFR 500. There is no sign of infection on her chest examination. She is given 5mg nebulised salbutamol to good effect & her PEFR rises to 425. Which treatment should be prescribed next?
Management of Poisoning

A  Intravenous N-acetylcysteine
B  Oral methionine
C  Haemodialysis
D  Forced alkaline diuresis
E  Intravenous glucagons
F  Intravenous desferioxamine
G  Intravenous ethanol
H  Activated charcoal
I  Gastric lavage
J  Forced emesis
K  Hyperbaric oxygen
L  Intravenous naloxone

For each of the following patients choose the SINGLE most beneficial treatment in the acute management from the above list of options. Each option may be used once, more than once or not at all.

1. A 50 year old man with epilepsy took an overdose of his medications 1 hour ago. He has a dry mouth & dilated pupils but is not drowsy.

2. A 30 year old woman with toothache has taken 50 paracetamol 500mg tablets in the last 24 hours. She feels nauseated, & still has toothache, but is otherwise well.

3. A 20 year old heroin addict arrives in casualty unconscious & cyanosed. His respiratory rate is 6/min & he has pinpoint pupils.

4. A 40 year old woman with a history of hypertension arrived in Casualty 2 hours ago having taken a whole bottle of her medication in an attempt to commit suicide. She suddenly collapses with a pulse of 30 & a BP of 70/30.

5. A 45 year old homeless man complains of headache, abdominal pain, nausea & dizziness. He admits to having drunk anti-freeze on the previous night. He is hyperventilating & slightly drowsy.

6. A 3 year old boy was found unconscious at home by his mother with an empty medicine bottle next to him. The bottle had contained ferrous sulphate tablets.
Management of Rectal Bleeding

A  Haemorrhoidectomy  
B  Oral steroids  
C  Hemicolecotomy  
D  Loperamide (Imodium)  
E  Topical GTN with anal dilatation  
F  Anterior resection  
G  IV immunoglobulin  
H  High fibre diet  
I  Colostomy  

For each of the patients below, choose the SINGLE most likely management from the above list of options. Each option may be used once, more than once or not at all.

1  A 35 year old lawyer with a history of recurring piles & having been treated by his GP with sclerosing therapy continues to bleed. He is referred to surgical outpatients for more definitive treatment.

2  A 33 year old man has pain & bleeding on defecation

3  A 39 year old woman who is on mesalazine for her ulcerative colitis presents with unremitting diarrhoea & rectal bleeding; she is noted to have a raised ESR.

4  A 24 year old woman following a viral infection was diagnosed as having idiopathic thrombocytopenia. She presents to A&E & complains of multiple bruising & rectal bleeding. She is on oral prednisolone 30mg/day. Her Hb is 12.5g/dl.

5  A 58 year old man was admitted complaining of abdominal pain. He is found to have rectal carcinoma.
Management of Stable Angina

A  Coronary angiography
B  Exercise ECG
C  Thallium scan
D  Beta-blockers
E  Long acting nitrates
F  Verapamil or diltiazem
G  Angioplasty +/- stenting
H  Amlodipine
I  ACE inhibitor

For each patient below, choose the SINGLE most appropriate initial management from the above list of options. Each option may be used once, more than once or not at all.

1  A 48 year old man presents with central chest pain on unusual exertion. Resting ECG is normal & there are no obvious risk factors. He would prefer not to take medication until a definitive diagnosis is made.

2  A 55 year old man is taking increasing doses of sublingual glyceryl trinitrate for established stable angina. He has chronic obstructive airways disease with markedly reduced PEFR. Coronary angiography has shown diffuse disease but he has refused intervention.

3  A 60 year old man with stable angina is awaiting surgery. He is on the highest tolerated dose of beta-blocker but is still symptomatic. Blood pressure is 170/95mmHg.

4  A 50 year old man presents with a typical history of exertional angina with ischaemic changes on resting ECG. Coronary angiography shows 70% stenosis of the left anterior descending artery with no significant lesions elsewhere.
Management of the Acute Abdomen

A  Diagnostic laparoscopy
B  Laparotomy
C  CT scan
D  Ultrasound scan
E  Serum amylase
F  Laxatives
G  Nasogastric tube
H  Intravenous urogram
I  Intravenous antibiotics
J  Endoscopy

For each patient below, choose the SINGLE most appropriate initial management plan from the above list of options. Each option may be used once, more than once or not at all.

1. A 23 year old woman presents with a 24 hour history of right iliac fossa pain. There is tenderness & guarding in the right iliac fossa. There are no menstrual symptoms. Abdominal & pelvic ultrasound is normal.

2. A 30 year old man presents with severe left loin pain, colicky in nature. It radiates towards the left groin.

3. A 45 year old man presents with sudden onset epigastric pain, constant in nature. He has had several previous episodes. He drinks half a bottle of whisky per day.

4. A 70 year old woman, who underwent a right hemicolecotomy for caecal cancer 5 years ago, presents with abdominal distension, colicky pain & profuse vomiting. There is minimal abdominal tenderness.

5. A 48 year old woman presents with a 1 day history of constant right upper quadrant pain, radiating around the right side of the chest. She says her urine may be darker than usual. Her GP started her on oral antibiotics.

6. A 78 year old woman presents with a 3 day history of constant left iliac fossa pain. She has a pyrexia of 38°C, & left iliac fossa tenderness & guarding. CT scan demonstrates an inflamed sigmoid colon with numerous diverticulae.
Management of Unconsciousness

A  Burr hole formation  
B  Urgent CT scan  
C  Cardioversion  
D  Benzylpenicillin IM  
E  Adrenaline subcutaneously  
F  Elevate legs  
G  Glucose administration IV  
H  Colloid infused rapidly  
I  Place patient in recovery position  
J  Remove oxygen mask  
K  Naloxone administration IV  
L  Phenytoin administration IV  
M  Tracheostomy formation  

For each clinical scenario below, choose the SINGLE most appropriate action from the above list of options. Each option may be used once, more than once or not at all.

1  30 year old male is brought into A&E having been found unrousable by his partner on the floor. He has evidence of needle track marks. He is breathing very occasionally & has small pupils.

2  A 50 year old male collapses in front of you in the street. He is seen to be convulsing & is incontinent of urine. He is unresponsive.

3  An 18 year old man attends his GP to undergo a routine blood test. He has no significant past medical history. While having the blood test he becomes pale, clammy & says he feels sick. He subsequently becomes unresponsive.

KIF
Metabolic Syndromes

A  Hyperkalaemia
B  Hypernatraemia
C  Hypercalcaemia
D  Hypocalcaemia
E  Hyponatraemia
F  Hypothyroidism
G  Hypokalaemia
H  Hypermagnesaemia
I  Hypercapnia
J  Metabolic acidosis
K  Hypoglycaemia
L  Addison’s disease

For each patient below, choose a SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 64 year old woman complaining of severe back pain for some weeks. For the last few days she has been very constipated & has been vomiting for 24 hours. She has been a smoker for many years & has had 3 courses of antibiotics for chest infections over the last 3 months.

2  A 21 year old woman has been complaining of increasing tiredness & feeling thirsty. Over the last day she had been confused. On arrival in A&E she was noted to have deep sighing respiration.

3  A 58 year old man who had been on amiodarone for 2 years for atrial fibrillation complained of increasing tiredness. He had gained 5kg in weight over the last 6 months. His wife complained that he was always feeling cold even in a warm room.

4  A 22 year old woman was admitted with abdominal pain. Her mother had pernicious anaemia. On examination, vitiligo was noted & the creases of her palms appeared dark. BP was 100/50 lying & 80/60 standing.

5  A 43 year old woman, 24 hours after a total thyroidectomy for Grave’s disease develops stridor & carpo-pedal spasm.
Microbes Causing Chest Infections

A  Corynebacterium diphtheriae
B  Streptococcus pneumonia
C  Group A streptococci
D  Escherichia coli
E  Haemophilus influenzae
F  Mycoplasma pneumoniae
G  Aspergillus fumigatus
H  Pneumocystis carinii
I  Staphylococcus aureus
J  Influenzae A
K  Legionella pneumophila
L  Adenovirus
M  Varicella zoster
N  Clamidia pneumoniae

For each of the patients below, choose the SINGLE most likely microbe from the above list of options. Each option may be used once, more than once or not at all.

1  A 36 year old popstar presents with fever, a cough & an itchy vesicular rash. Chest x-ray shows mottling through both lung fields.

2  A 60 year old woman presented to the casualty with chest pain on coughing, fever, shortness of breath for the last 2 days. Her chest x-ray showed right lower lobe consolidation & pleural effusion.

3  30 year old intravenous drug abuser presented to the GP with shortness of breath. The GP sent him for a blood count, HIV testing & a chest x-ray. He was found to be HIV positive. Chest x-ray showed bilateral fluffy opacities.

4  A plumber renovating old properties presented to casualty with fever & loss of consciousness. On examination he had bilateral consolidation. Plasma sodium was low. The doctor sent for urinary antigen & serology. On the results he was treated with erythromycin & ciprofloxacin & improved.

5  A holiday worker had a severe chest infection abroad & was diagnosed to have influenza A infection. He was improving but suddenly deteriorated with the last 24 hours becoming breathless, febrile & septic. X-ray chest showed circular opacities some with a fluid level. Gram stain of sputum showed Gram positive cocci in clusters.

MBHKI
Modes of Inheritance

A  Autosomal dominant
B  Autosomal recessive
C  X-linked dominant
D  X-linked recessive
E  Polygenic inheritance
F  Spontaneous mutation
G  Chromosomal abnormality
H  None/unknown

For each of the following patients choose the SINGLE most likely mode of inheritance from the above list of options. Each option may be used once, more than once or not at all.

1  Duchenne muscular dystrophy.
2  Cystic fibrosis.
3  Achondroplasia.
4  Down’s syndrome.
5  Multiple sclerosis.

DBAGH
Multidisciplinary Management of Stroke

A  Speech therapist
B  Physiotherapist
C  Social worker
D  Occupational therapist
E  Nursing staff
F  Dietician
G  Doctor
H  Pharmacist

For each aspect of management of stroke described below, choose the SINGLE most appropriate member of the healthcare team from the above list of options. Each option may be used once, more than once or not at all.

1  Helps ensure the patient takes his drugs at the appropriate time.
2  To assess need for physical aids on discharge
3  Ensures patient has support to ensure personal hygiene & enough food to maintain nutrition.
4  Prevention of bedsores & constipation.
5  Assess swallowing.

EDCBA
Nausea & Vomiting

A  Myocardial infarction
B  Labyrinthitis
C  Meningitis
D  Appendicitis
E  Pancreatitis
F  Small bowel obstruction
G  Migraine
H  Gastric ulcer
I  Gastroenteritis
J  Large bowel obstruction

Match the above conditions to the presentations shown below.

1 A 45 year old diabetic man collapses while painting his house after taking some tablets for painful indigestion & is brought into A&E sweating & in distress. His wife had to stop the car en route for him to vomit. Examination shows him sweating & tachycardic but is otherwise unremarkable.

2 A student teacher presents on your take after school she has noticed that she is drowsy & irritable. She has a splitting headache & has vomited 3 times. There is no blood in the vomit & she denies any relationship to eating. On examination her pulse is slow but regular & her blood pressure is increased.

3 A widowed 55 year old man complaining of a severe pain in his abdomen is admitted while drunk. He finds the pain eases when he sits forward as it radiates to his back. He relates to you that he has been vomiting heavily. On examination he is pyrexial & tachycardic, with a rigid abdomen.

4 A 25 year old man gives a history of loss of appetite & nausea over 2 days with profuse vomiting. He also has colicky abdominal pain with increased bowel sounds. Past medical history reveals that he had an exploratory laparotomy 2 years ago.

5 A patient who is unsteady on their feet reports to you a history over 3 days of 20 minute unsettling spells of nausea & vomiting where their unsteadiness increases & they feel they are veering sideways. On examination they are pale & sweaty but little else is remarkable.

ACEFB
Neck Lumps

A  Glandular fever
B  Tonsillitis
C  TB abscess
D  Hodgkin’s disease
E  Thyroglossal cyst
F  Non-hodgkin’s lymphoma
G  Dermoid cyst
H  Carcinomatous lymph node
I  Carotid body tumour

Match the patient’s description to the most likely diagnosis

1  A 16 year old female presents with a non-tender midline neck lump, that moves on protruding the tongue. There are no other associated symptoms.

2  A 57 year old publican presents with a painless supraclavicular lump. He complains of abdominal pain & has recently noticed that his trousers seem too big him.

3  A 22 year old student presents with a painless lump in the posterior triangle of the neck. The lump is smooth & rubbery. He feels generally unwell, has lost weight & complains of itchiness. Lymph node biopsy shows Reed-Sternberg cells.

4  48 year old business presents with recent blackouts. He has a non-tender lump in his neck, which he has noticed has increased in size over a couple of years. On examination the lump is situated in the anterior triangle & is pusatile.

5  A 25 year old West Indian lady presents with a painful swelling in the upper neck. The lump fluctuates, is not hot & the overlying skin is discoloured. She is tachycardiac, pyrexial & feels generally unwell.

EHDIC
Neurological Problems

A  Epilepsy
B  Parkinson’s disease
C  Meningitis
D  Motor neuron disease
E  Diabetic neuropathy
F  Bell’s palsy
G  Left sided stroke
H  Multiple sclerosis
I  Duchenne’s muscular dystrophy
J  Right sided stroke

Match the following clinical scenarios with the most likely diagnosis from the list above

1  A 72 year old man with uncontrolled blood sugar has presented with ulcers in his right foot & bilateral loss of sensation below knee.

2  A 77 year old lady with 15 year history of hypertension is brought to A&E. She is unable to speak & cannot move her right arm & leg.

3  A 17 year old boy comes to the clinic with his mother. He complains of recurrent transient episodes of tingling & weakness in his left leg. You also notice his mother has swollen MCP joints & ulnar deviation in both hands.

4  A 79 year old man complains of difficulty walking. On examination you also notice he has a resting tremor & his limbs oppose movement.
Neurology

A  TIA
B  Meningitis
C  Parkinson’s disease
D  Multiple sclerosis
E  Subarachnoid haemorrhage
F  Bell’s palsy
G  Epilepsy
H  Subdural haemorrhage
J  Carpal tunnel syndrome
K  Myasthenia gravis

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1  A 50 year old man develops sudden onset of weakness, numbness & paraesthesiae on the left side of his body. His symptoms faded gradually before disappearing 12 hours later.

2  A 40 year old man with sudden onset of a severe headache, drowsiness & vomiting.

3  A 60 year old man had a fall following one of his drunken episodes. During the proceeding 2 weeks he experienced intermittent periods of drowsiness & headaches. His wife also observed some changes in his personality notably aggressive behaviour.

4  A 20 year old student developed a headache, fever, & vomiting during one of his lectures. A class mate reports that he was breathing very quickly. On arrival at the surgery 30 minutes later he was semi-conscious, & breathing irregularly. His upper limbs were also jerking.

5  A 30 year old woman experienced a strange feeling in her stomach, followed by stiffness & jerking in the left arm. She was incontinent of urine before becoming drowsy & falling asleep.

6  The wife of a 60 year old man noticed that his movements had slowed down recently. His gait is shuffling & he had a resting tremor of the hands.

7  A 30 year old lady presented with pain in the left eye; numbness & weakness of her right leg. 2 months earlier she had an episode of double vision in the left eye.

8  A 50 year old man with left sided facial weakness, watering of the left eye & dribbling. On examination he was unable to close his left eye or whistle.

9  A 40 year old lady with pain & tingling in the left hand, worse at night time when she had to get out of bed to shake the hand for relief.

10 A 25 year old pregnant lady with increasing muscle weakness. She also complains of double vision & drooping eye lids.

AEHBGCDFJK
Neuro-pharmacology

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<tr>
<td>A</td>
<td>Baclofen</td>
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<td>Carbamazepine</td>
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<td>Propranolol</td>
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<td>I</td>
<td>Riluzole</td>
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<tr>
<td>J</td>
<td>Sodium valproate</td>
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</tbody>
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For each of the clinical conditions described below, choose the most appropriate drug from the above list of options. Each option may be used once or not at all.

1. The drug used to treat cognitive impairment in Alzheimer's disease.
2. The drug used in the treatment of Parkinson’s disease.
3. The drug used with limited success to delay motor progression in motor neurone disease.
4. The drug used to treat spasticity.
5. The drug used to treat essential tremor.
Oncological Emergencies

A  Hypercalcaemia
B  SVC obstruction
C  Spinal cord compression
D  Raised intracranial pressure
E  Inappropriate ADH secretion
F  Tumour lysis syndrome

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1  A 40 year old lady with metastatic breast cancer presented with back pain, weakness, upper motor neurone & sensory signs.

2  A 70 year old man with lung cancer presented with distended neck veins; headache & a feeling of fullness in the head.

3  A 60 year old man with cancer of the prostate presents with malaise, polydipsia, polyuria, confusion, weight loss, confusion & psychosis.
Oncology

A  Melanoma
B  Pituitary tumour
C  Chronic myeloid leukaemia
D  Phaeochromocytoma
E  Acute lymphocytic leukaemia
F  Malignant (Non-Hodgkin’s) lymphoma
G  Fibroadenoma

1  A 37 year old woman has noticed an abnormal swelling on her left breast recently. The lump is non painful & is mobile.

2  A 42 year old man presents with a 3 week history of headache, sweats, palpitations, tremor, & anxiety. On examination, he is found to have a blood pressure of 184/122, a heart rate of 114 & a palpable liver.

3  A 53 year old Caucasian male has presented concerned about a change in skin colour he has noticed recently on his forehead. He says that it has bled occasionally & is itchy. He admits to love being outdoors whenever he can.

4  A 34 year old housewife presents complaining recently of a lack of libido, excess milky discharge from her breast, amenorrhoea. She is complaining that she is trying for another child but has so far failed to conceive.

5  A 27 year old male presents with a 3 month history of gradual weight loss, tiredness, fever, sweats, bleeding & abdominal pain. On examination he exhibited splenomegaly & some bruising. Subsequent analysis revealed an increased WCC, a decreased Hb & the presence of the Philadelphia chromosome.
Pelvic Inflammatory Disease

A  Actinomyces israelii
B  Chlamydia trachomatis
C  Entamoeba histolytica
D  Escherichia coli
E  Gardnerella vaginalis
F  Herpes hominis
G  Mycobacterium tuberculosis
H  Neisseria gonorrhoea
I  Staphylococcus aureus

For each patient below, choose from the list above the single most relevant organism. Each option may be chosen more than once or not at all.

1  A 24 year old sexually active girl has lower abdominal pain & pustules on hands.
2  A 42 year old presents with weight loss, night sweats, chronic abdominal pain & a tubo-ovarian mass.
3  A 30 year old lady presents with lower abdominal pain & has an intra-uterine device.
4  A teenage girl is admitted 4 months after menarche with a rash & septic shock.
5  A 25 year old lady has very mild lower abdominal pain. Laparoscopy reveals a severe inflammatory process.
Pelvic Pain

A UTI
B Urinary tract stones: bladder outflow obstruction
C Urinary tract stones: ureteric colic/stricture
D Endometriosis
E Colorectal cancer
F Bladder cancer
G Endometritis
H Ovarian cyst
I Labour
J Acute urine retention

1 A 60 year old man, on anti-cholinergic drugs, presents with suprapubic pain. He complains that he has not passed any urine in 3 days. On exam he has a distended bladder.

2 An overweight 30 year old lady, presents to A&E with intense abdominal pain & vomiting which started last night. She says she has noticed weight gain & pelvic pain for a few months. On exam she has gross swelling of the abdomen.

3 A 45 year old smoker, presents with painful haematuria. He has a history of recurrent UTI. He explains to the medical student that although he is now a taxi driver, he worked in the rubber industry for 20 years.

4 A 23 year old lady presents with increased frequency of passing urine. She complains that ‘passing water is painful & smelly’. On exam she has suprapubic pain & tenderness. She has just recovered from a chest infection, which was quickly treated.

5 A 50 year old lady presents to A&E in excruciating pain. It radiates from the flank to the iliac fossa & labium. She cannot lie still, & is pale, sweaty & vomiting. After a few hours the pain has subsided.
**Pelvic Pain**

A  Appendicitis  
B  Chronic pelvic inflammatory disease  
C  Endometrial cancer  
D  Endometriosis  
E  Fibroids  
F  Irritable bowel syndrome  
G  Ovarian cyst  
H  Retroverted uterus

For each case below choose the SINGLE most likely diagnosis from the list of options above.

1. A 33 year old lady with no children who has been suffering worsening pelvic pain particularly prior to menstruation & is now complaining of deep dyspareunia.

2. A 55 year old lady on HRT who has been experiencing non specific pelvic pain & has occasional spotting of blood prior to her withdrawal bleed on HRT.

3. A 21 year old lady on no form of contraception & sudden onset of colicky intermittent pain.

DCG
Prostatic Diseases

A  Localised prostate cancer
B  Advanced prostate cancer
C  Chronic prostatitis
D  Bacterial cystitis
E  Gram negative septicaemia
F  Benign prostatic enlargement
G  Bladder calculus
H  Hydronephrosis

What diagnosis might be suggested by the following clinical scenarios? Each option may be used once, more than once or not at all.

1  A 75 year old man presents with acute pain in his ribs & back. He also has urinary frequency & a poor flow with a hard prostate on digital examination.

2  A 60 year old man has pain in his bladder on standing & difficulty in emptying his bladder with blood at the end of the stream.

3  A 65 year old man presents with a large painless bladder & overflow incontinence at night & a raised creatinine level.

4  A 30 year old man complains of pain in the rectum, groin & urinary frequency with dysuria.

BGFC
Rectal Bleeding

A  Anal carcinoma
B  Anal fissure
C  Colonic carcinoma
D  Colonic polyp
E  Crohn’s disease
F  Diverticular disease
G  Haemorrhoids
H  Infective colitis
I  Ischaemic colitis
J  Ulcerative colitis

The patients below have all presented with rectal bleeding. Please select the most appropriate diagnosis from the above list.

1  A 64 year old man presents with a 1 day history of dark rectal bleeding. He has complained of some diarrhoea for the last 6 months, & has noticed some loss of weight. Rectal examination & proctoscopy are normal.
FBC: Hb 9.9g/dl, WCC 6.2x10⁹/l, MCV 84.3fl

2  A 24 year old woman presents with a 3 month history of lower abdominal colicky pain, diarrhoea (bowels open 6-10 times per day) & passage of blood mixed with the stool.
FBC: Hb 8.8g/dl, WCC 12.1x10⁹/l, MCV 78.6fl, ESR 62mm/hr

3  A 54 year old man with no previous abdominal symptoms complains of several episodes of painless bright red rectal bleeding which is separate from the stool. Abdominal, rectal examination & proctoscopy are normal.
FBC: Hb 12.5g/dl, WCC 5.4x10⁹/l

4  A 24 year old man presents with a 3 month history of episodes of painless, bright red rectal bleeding on straining at stool. He has noticed some blood in the bowl, separate from the stool & some on the paper after wiping.
FBC: Hb 13.7g/dl

5  A 28 year old female medical student returns from her elective in Africa with a short history of severe lower abdominal cramps & the passage of bloody diarrhoea.
FBC: Hb 13.7g/dl, WCC 13.2x10⁹/l, ESR 50mm/hr

CJDGH
Rectal Bleeding

A  Diverticular disease
B  Caecal carcinoma
C  Ulcerative colitis
D  Rectal carcinoma
E  Haemorrhoids
F  Anal fissure
G  Infective diarrhoea
H  Duodenal ulcer
I  Meckel’s diverticulum
J  Acute ischaemic bowel
K  Crohn’s disease

For each patient below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1. A 60 year old woman presents with a poor appetite, weight loss, tiredness & right iliac fossa intermittent discomfort for the last 6 weeks.

2. A 30 year old man presents with painless fresh rectal bleeding which appears on the stool, on the paper & in the toilet bowel.

3. A 70 year old man with atrial fibrillation presents with a 2 hour history of general abdominal discomfort, & is shocked & has passed bloody diarrhoea.

4. A 59 year old man presents with 1 month history of constipation, tenesmus & fresh rectal bleeding.

5. A 25 year old woman presents with a 4 month history of diarrhoea, altered blood & mucus per rectum.

6. A 49 year old man, with a 5 year history of dyspepsia, collapses in the pub. He has noticed that his stools have become black over the last few days.

7. A 68 year old woman presents with a 2 days history of passing copious quantities of blood with history per rectum. She has also had left iliac fossa pain during her period.

BEJDCHA
Respiratory System

A  Bronchial asthma
B  Cystic fibrosis
C  Bronchiectasis
D  Bronchial carcinoma
E  Sarcoidosis
F  Atypical pneumonia
G  COPD
H  Lung abscess
I  Fibrosing alveolitis
J  Pleural effusion
K  Pneumothorax

For each patient below, choose the SINGLE most likely cause of the symptom from the above list of options. Each option may be used once, more than once or not at all.

1  A 30 year old company executive became unwell whilst on a business trip. He developed a high fever, muscle pains, nausea & vomiting, abdominal pain. He admitted to the hotel doctor that his cough has worsened over the past 7 days & he had coughed up blood on a couple of occasions. Chest x-ray showed consolidation in both lungs.

2  A 40 year old alcoholic man who was treated for a chest infection one week previously, developed a productive cough, & a fever. He felt unwell. He lost weight during this period of illness & also coughed up blood several times. A chest x-ray showed a fluid level in the right lung.

3  A 46 year old man with recurrent episodes of chest infection & diarrhoea, which is difficult to flush away in the toilet. He developed a persistent cough with the production of sputum & blood. On examination his fingers are clubbed & in his chest there are low pitched inspiratory & expiratory crackles, plus some wheeze. He recalls being small for his age despite having a healthy appetite.

4  Mr Jones is a 60 year old man who smoked heavy over the past 40 years (up to 40 cigarettes per day). He gives a 4 week history of a cough with the production of sputum & blood, breathlessness chest pain & weight loss. On examination his fingers were clubbed & he had a ptosis in the left eye.

5  John is a 35 year old tennis player who complains of breathlessness after games. His sleep has been disturbed recently by coughing during the night. On examination he was a tall, thin but athletic looking young man. There were high-pitched expiratory wheeze in both lungs.

6  Mark is a 20 year old student who developed acute chest pain with breathlessness after working out at the gym. On examination he was breathless at rest. Expansion of the chest was restricted on one side with hyper-resonant percussion note.
Rheumatology

A  Osteomalacia  
B  Polymyalgia rheumatica  
C  Septic arthritis  
D  Ankylosing spondylitis  
E  Rheumatoid arthritis  
F  Reactive arthritis  
G  Polymyositis  
H  Paget’s  
I  Wegener’s granulomatosis  
J  Osteoarthritis  
K  SLE

Select the most appropriate diagnosis.

1  A 22 year old male develops lower back pain & stiffness, which is worse in the morning & is relieved by exercise.

2  Following an acute attack of dysentery, a 46 year old male develops enthesis (heel pain), keratoderma blemorrhagia on the soles of his feet & a right knee joint effusion.

3  A 70 year old patient develops pain & stiffness of the shoulders, neck, hips & lumbar spine. Symptoms are worse in the morning & have been present for over a month. The patient also suffers from fatigue, depression, fever & anorexia.

4  A 66 year old patient, with chronic renal failure develops vague symptoms of bone pain. The patient also has a tremor & a proximal myopathy.

5  In this condition, ~ 80% of sufferers are ANA +ve, ~ 40% are RF +ve, & it is more common in Afro-Caribbeans.
Shortness of Breath

A  Asthma  
B  Anaemia  
C  Left ventricular failure  
D  Pulmonary embolus  
E  Pneumonia  
F  Pneumothorax  
G  COPD  
H  Anxiety  
I  Epiglottitis  
J  Mitral stenosis  
K  Thyrotoxicosis  
L  Aspirin poisoning  
M  Mitral regurgitation

Match the patient description with one of the above diagnoses

1. A 70 year old male smoker with a 5 year history of productive cough presents with breathlessness. On examination you find hyperinflation & diminished breath sounds when examining the chest.

2. A 40 year old widowed female presents with a 3 week history of shortness of breath. She also complains of chronic fatigue. On examination she is pale with a pulse of 120.

3. An 85 year old male presents with shortness of breath associated with confusion. On examination there is decreased expansion on the left side & the patient with respiratory rate of 35/min.

4. A 75 year old recently widowed male smoker with a history of angina presents with shortness of breath. He has also vomited & complains of a ringing in his ears. On examination the patient has a BP of 80/50mmHg & fine crackles at both lung bases.

5. An 80 year old female with a history of rheumatic fever in childhood & palpitations presents with shortness of breath. On examination he has an irregularly irregular pulse of 120bpm & loud first heart sound.
Skin

A  Candida albicans
B  Eczema
C  Impetigo
D  Cellulitis
E  Pityriasis rosea
F  Tinea cruris
G  Herpes zoster
H  Urticaria
I  Congenital hyperurichosis languinosa
J  Scabies
K  SLE
L  Lichen planus
M  Psoriasis
N  Erythema multiforme
O  Syphilis
P  Leprosy

1 Mr Suoney has had an ulcer in gaiter region for a few weeks. Recently the area surrounding it has become hot, tender. The area surrounding it is a confluent erythematous area that is spreading up the legs. Patient’s temp is 38°C.

2 21 year old medical student called Jon Lillie presents to casualty. He thinks he might have supercaligloois disognolibe disease? He has well demarcated pinkish-red scaly plaques limited to his knees & elbows. He wants to get to the bottom of this because he has med/surg exams coming up.

3 Mr Licken who is 22 presents to Casualty feeling very unwell. He said his belly felt tingly & painful. On examination he is seen to have a painful tender blistering eruption localised in his left flank.

4 Juan de Marco presents to his private doctor. He is quite embarrassed. After much persuasion he pulls down his trousers to show an area with well demarcated red plaques with arc-like border extending from groin down his upper thigh. It has been progressively spreading over last 2 weeks. There are no salellise lesions.

5 Jon Lillie presents to Casualty again, saying that he had red weals that appeared yesterday evening all over his legs. They all appeared while he was watching Popstars. He said he first noticed them because they were very itchy. However this morning all evidence of the weals had gone. Patient can think of no cause for this. The doctor sends him home thinking he’s made this all up just so he has an excuse to come to hospital on a Sunday.
6 Marjorie rushes into C&W with her precious little Johnny demanding he sees a consultant. You are the only person around so you have a look at Johnny to find a weeping exudative area below his chin. There is a honey-coloured crust on the surface. Marjorie is anxious he looks alright for his school photo today. Johnny’s girlfriend Sally, had to miss hers yesterday because she had a similar problem.

7 Patient looks like a Werewolf. Patient’s brother is in Lebanese circus & suggests his sibling doesn’t bother with the doctors but comes & makes some money.
Skin Manifestations of Systemic Disease

A  Ulcerative colitis
B  Crohn’s disease
C  Coeliac disease
D  Hypothyroidism
E  Hyperthyroidism
F  Scleroderma
G  Diabetes mellitus
H  Primary amyloidosis
I  Rheumatoid arthritis
J  Systemic lupus erythematosus
K  Dermatomyositis
L  Sarcoidosis

For each of the following patients choose the SINGLE most likely underlying diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 30 year old female smoker has atrophic waxy yellowish plaques on her shins with surrounding erythema.

2  A 35 year old woman has tight shiny skin on her hands & around her mouth. There are also telangiectasia on her face.

3  A 20 year old man has a small group of slightly erythematous ring-shaped papules around his left ankle. Skin scrapings for fungal infection are negative.

4  An 18 year old with a history of diarrhoea has painful pustular lesions which are ulcerating.

5  A 28 year old woman has indurated plaques of reddish-yellow thickened skin over both shins. She also has areas of depigmentation on her hands & face.

6  A 65 year old man with painful shoulders & hips has purple swollen eyelids & red scaly papules over the knuckles.

GFGAEK
## Skin Rashes

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<tbody>
<tr>
<td>A</td>
<td>Bullous impetigo</td>
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<tr>
<td>B</td>
<td>Bullous pemphigoid</td>
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<td>C</td>
<td>Calciphylaxis</td>
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<td>D</td>
<td>Chicken pox</td>
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<td>E</td>
<td>Dermatitis herpetiformis</td>
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<td>F</td>
<td>Epidermolysis bullosa</td>
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<td>G</td>
<td>Erythema multiforme</td>
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<td>H</td>
<td>Erythema ab igne</td>
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<tr>
<td>I</td>
<td>Hand, foot &amp; mouth disease</td>
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<td>J</td>
<td>Meningococcal meningitis</td>
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<tr>
<td>K</td>
<td>Pemphigus</td>
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Select the most likely diagnosis from the above list for each of the following cases

1. A week old baby presents with fragile skin that blisters on contact.
2. A 6 year old presents with a 5 day history of flu-like symptoms with an irritating cough. Her parents have noticed a widespread erythematosus, pruritic rash.
3. A 70 year old female presents with large, tense blisters on the legs. The blisters have an erythematosus base & some are blood-filled.
4. A 60 year old female has flat, fragile blisters & erosions on the trunk. She also has similar lesions on the inside of the mouth.
5. An 18 year old male presents with an intensely pruritic vesicular rash on the buttocks, elbows, knees & shins. Over the last 6 months he has been aware of a 6kg unintentional weight loss & loose motions.
Splenomegaly

A  Bacterial endocarditis
B  CML
C  Gaucher’s disease
D  Hodgkin’s disease
E  Idiopathic myelofibrosis
F  Infectious mononucleosis
G  IDA
H  Malaria
I  Metastatic carcinoma
J  Polycythaemia
K  Portal hypertension
L  Sarcoidosis

For each patient with splenomegaly, select the most likely diagnosis from the above options.

1. A 55 year old man presents with a few months history of weight loss, lethargy & fever. On examination, he has a large liver & spleen. His WBC is 10.2x10^9/l & his blood film shows increased granulocytes & granulocyte precursors.

2. A 27 year old Afro-Caribbean man presents with fever, weight loss & intractable itch. His spleen is just palpable & he has 2 3cm nodes in his right neck.

3. An 18 year old Caucasian shop assistant presents with fever & a sore throat. She is found to have enlarged but soft cervical lymph nodes & a soft spleen palpable 3cm below the costal margin. Blood film shows atypical lymphocytes.

4. A 70 year old English woman presents with fever, slight splenomegaly, splinter haemorrhages & a diastolic murmur at the apex of the heart.

5. A 65 year old man presents with angina & claudication. He is found to have a firm spleen extending 20cm below the costal margin. His Hb is 7.5g/dl & his blood film is leuco-erythroblastic.

BDFAE
Swollen Legs

A  Heart failure
B  DVT
C  Nephrotic syndrome
D  Portal hypertension
E  Renal failure
F  Pelvic malignancy
G  Lymphoedema
H  Cellulitis
I  Calcium antagonist side effect

Match the description of the patient with the most likely diagnosis.

1  59 year old male smoker with 2 month history of increasing shortness of breath. For the last week he has noticed increasing ankle swelling. He was found to be centrally cyanosed, have a raised JVP, expiratory rhonchi, sacral & leg oedema.

2  55 year old alcoholic presented to casualty with swollen legs & ascites. JVP was not raised. Liver was smooth & enlarged by 3cm. Blood testing revealed low plasma albumin (14g/l), normal plasma urea (7.2mmol/l) & normal creatinine (96umol/l). Liver function tests were otherwise normal. Protein +++ was found on urine dipstix.

3  46 year old diabetic with history of laser treatment to eyes was admitted with increasing shortness of breath & swollen legs. ECG was normal, chest x-ray confirmed pulmonary oedema, heart was slightly enlarged. Blood pressure was 150/100. Blood test revealed plasma creatinine 560umol/l.

4  33 year old woman presents to casualty with swollen tender right calf which developed on her return from Australia. Examination revealed tender swollen hot red calf.

5  62 year old woman with history of hypertension & ischaemic heart disease. Her GP had recently increased the dose of nifedipine as her BP had been 155/95. 2 weeks later she complained that her legs had both become swollen & hot. On examination her JVP was not raised, breath sounds were normal & both legs were found to have pitting oedema. Urine testing revealed protein +.

ACEBI
## Syncope

| A | Stroke          |
| B | Postural hypotension |
| C | Hypoglycaemia   |
| D | Simple faint    |
| E | Epilepsy        |
| F | Aortic stenosis |
| G | Anaemia         |
| H | TIA             |
| I | Cardiac arrhythmia |
| J | Pulmonary stenosis |

What is the most likely diagnosis for each presentation?

1. A 65 year old man with a history of an MI 2 years ago. On examination 36 hours later he has reduced power in his left arm & leg.

2. A 56 year old lady collapses whilst running for the bus. On examination, there is a thrusting apex beat & an ejection systolic murmur best heard on expiration & radiating to the carotid arteries.

3. A previously well 14 year old girl collapses after being in a crowd for 2 hours at a pop concert.

4. A 56 year old man collapses suddenly as he is walking across the living room. His daughter, who witnesses the collapse, says he dropped suddenly, became very pale & started to twitch, which lasted a few seconds. After she woke him up, with difficulty, he became flushed & on examination, his nervous system is normal.

5. A 70 year old lady with a history of well-controlled diabetes collapses when she gets out of bed in the morning & is brought in after she pulls the emergency cord in her sheltered accommodation. She is on medication for hypertension. Her ECG is unremarkable.
### The Acute Confusional State

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<tr>
<td>A</td>
<td>U&amp;E imbalance</td>
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<td>B</td>
<td>CVA</td>
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<td>C</td>
<td>Faecal impaction</td>
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<td>D</td>
<td>Thyamine or vitamin B12 deficiency</td>
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<td>E</td>
<td>Post operative</td>
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<td>MI</td>
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<td>UTI</td>
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<td>H</td>
<td>Liver failure</td>
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<td>I</td>
<td>Diabetic hypoglycaemia</td>
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<td>J</td>
<td>Hypoxia</td>
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1. A 75 year old lady is brought to A&E after being found on the floor of her home by her daughter. She appears confused & scores only 4/10 on a mini mental test. On examination she is febrile & complains of a burning pain in her lower abdomen.

2. An 80 year old gentleman presents in A&E with confusion accompanied with continuous diarrhoea. He has been taking codine tablets following his operation for a hip replacement he had done a month ago.

3. A 16 year old boy presents in A&E. He is sweating with a tremor & has a pounding heart beat. It came on after a sports session.

4. A 40 year old man who lives alone in a flat presents with confusion & ataxia in A&E. He shows Dupytrens contracture on both palms on examination.

5. A 77 year old lady with longstanding AF presents with confusion. She collapsed suddenly at home & on examination has an extensor plantar response.
The Causes of Impotence

A Diabetes mellitus
B Multiple sclerosis
C Haemochromatosis
D Tabes dorsalis
E Beta blocker therapy
F Thiazide therapy
G Pelvic trauma or surgery
H Carcinoma of the prostate
I Primary testicular failure
J Anxiety
K Cirrhosis of the liver
L Vascular disease

For each of the following patients choose the SINGLE most likely cause from the above list of options. Each option may be used once, more than once or not at all.

1 A 60 year old man has painful knees, a bronzed complexion & small firm testes. His impotence is a recent problem. He looks a little jaundiced.

2 A 50 year old man with chronic asthma was recently started on treatment for hypertension. He thinks his impotence is related to this.

3 A 50 year old male smoker has increasing problems with impotence. He also has intermittent claudication for which he takes tablets. He never wakes with an erection.

4 A 60 year old man has been passing excessive amounts of urine & has lost some weight recently. He feels thirsty & tired.

5 A 40 year old male smoker is otherwise well but says he cannot maintain an erection even though he often wakes with an erection in the morning.

6 A 60 year old man has been treated for poor urine flow & hesitancy. Since this treatment he has been unable to maintain an erection.
The Jaundiced Patient

A Gall stones
B Hepatitis A
C Hepatitis B
D Hepatitis C
E Carcinoma of head of pancreas
F Malaria
G Gilberts syndrome
H Primary sclerosing cholangitis
I Cholangiocarcinoma
J Dubin-Johnson syndrome
K Sickle cell anaemia
L Crigler-Najjar syndrome
M Primary biliary cirrhosis

Match each case below with the MOST LIKELY diagnosis from above. You can use each answer once, more than once or not at all.

1 A patient presents having been diagnosed with a slightly raised unconjugated bilirubin (with normal alkaline phosphatase & normal ALT) after a BUPA health check. On questioning they admit that last time they had a cold they went a slightly yellow colour. Their brother has had a past episode of jaundice.

2 A 10 year old West Indian boy who has been in the UK since birth, presents with a mild jaundice. On examination his spleen is slightly enlarged. Blood investigations show raised levels of unconjugated bilirubin. Serum transferases, ALP & albumin are normal.

3 An 18 year old student has just returned from an uneventful holiday in Africa. He is jaundiced & has moderate hepatomegaly. He has increased serum transaminases & elevated bilirubin, as well as specific IgM antibodies.

4 A 30 year old woman with ulcerative colitis presents with jaundice, pruritus, right upper quadrant pain & hepatosplenomegaly. On direct questioning she admits to having dark urine & pale stools. Her alkaline phosphatase & her conjugated bilirubin is raised.

5 A 60 year old woman presents with an intractable gnawing epigastric pain, weight loss & dyspepsia, as well as obstructive jaundice. On examination she has cachexia, fever & an enlarged gall bladder. Blood tests show an increased conjugated bilirubin & increased alkaline phosphatase.
The Treatment of Menopausal Symptoms

A  Clonidine
B  Combined hormone replacement therapy (HRT)
C  Dietary modification
D  Hypnotic preparations
E  Mineral supplements
F  Oestrogen only HRT
G  Psychological support
H  Referral to a psychiatrist
I  Regular exercise
J  Vaginal lubricant
K  Vaginal oestrogens

For each case below, choose the SINGLE most appropriate treatment from the above list of options. Each option may be used once, more than once or not at all.

1  A 56 year old woman whose periods stopped 5 years ago has become increasingly depressed. She now feels life is no longer worth living & threatens suicide.

2  A 72 year old woman has experienced frequency of micturition intermittently for the last few months. Mid-stream urine (MSU) cultures have been persistently negative. She is well otherwise, but would like the symptoms resolved.

3  A married 52 year old woman who has a family history of breast cancer has been experiencing mild discomfort for a few hours following intercourse for the last month. She is worried about using hormones.

4  A 45 year old woman who has had a total abdominal hysterectomy (TAH) & bilateral salpingo-oophorectomy (BSO) for fibroids & menorrhagia complains of hot flushes, night sweats & mood swings. She has no other medical problems.
# The Unconscious Patient

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<tr>
<td><strong>A</strong></td>
<td>CT scan brain</td>
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<td><strong>B</strong></td>
<td>DC cardioversion</td>
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<td><strong>C</strong></td>
<td>Endotracheal intubation</td>
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<tr>
<td><strong>D</strong></td>
<td>Lumbar puncture</td>
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<tr>
<td><strong>E</strong></td>
<td>Intravenous glucose</td>
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<tr>
<td><strong>F</strong></td>
<td>Intravenous naloxone</td>
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<td><strong>G</strong></td>
<td>Intramuscular glucagons</td>
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<td><strong>H</strong></td>
<td>Intravenous steroids</td>
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<td><strong>I</strong></td>
<td>Gastric lavage</td>
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<td><strong>J</strong></td>
<td>Commence CPR</td>
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For each of the cases below, choose the SINGE most appropriate next management option from the list above. Each option may be used once, more than once or not at all.

1. An unconscious 35 year old man who has a capillary blood glucose of 1.5mmol/l.
2. A 55 year old man found collapsed at home who, on arrival at hospital, has no palpable pulse or recordable blood pressure.
3. An 18 year old woman found unconscious at home. She has needle “track” marks in her arms, a respiratory rate of 10/min & pinpoint pupils.
4. A 34 year old woman who complained of a severe headache on waking & then collapsed.
5. An 18 year old known asthmatic with a respiratory rate of 50 & inaudible breath sounds on auscultation.

**EJFAC**
Thyroid Disease & Neck Lumps

A  Grave’s disease
B  Hashimoto’s thyroiditis
C  Myxoedema
D  Euthyroid goitre
E  Hodgkin’s disease
F  Thyroglossal cyst
G  Carotid artery aneurysm
H  TB abscess
I  Pancreatic carcinoma
J  Superior vena cava syndrome
K  Thyroid cancer

For each patient described below, choose a SINGLE most likely diagnosis from the above list of options. Each option may be used once, more than once or not at all.

1  A 28 year old woman has developed rapid weight loss & palpitations. You notice lid lag & a goitre on examination.

2  A 17 year old man has noticed a painless smooth swelling just above the suprasternal notch. He has had the swelling for 2 years & is well. It moves with swallowing & tongue protrusion.

3  A 17 year old girl has developed an acutely painful goitre. She has a fever & pain on swallowing.

4  A 22 year old man has developed multiple hard swellings on the left side of the neck. He has had night sweats & anorexia for 2 months.

5  A 67 year old male smoker has developed gross oedema of the neck & face. You also notice swelling of both hands.

6  A 20 year old medical student is concerned about recent weight gain & lethargy & constipation. You notice bradycardia & a goitre. Her ankle reflexes are sluggish. Her periods have stopped.

7  A 72 year old man with weight loss has developed a hard swelling in the left supraclavicular fossa.

AFDEJCI
Tired all the Time

A Hypothyroidism
B Sleep apnoea syndrome
C Depression
D IDA
E Chronic fatigue syndrome
F MS
G Carcinoma of caecum
H Pernicious anaemia
I RA
J Aids

All the following patients complain of feeling tired all the time. In addition, they have the following features. Select the most likely diagnosis from those above?

1 Mrs. Patel aged 28 is an immigrant from India. She is a vegetarian. Examination is mostly unremarkable, but she looks rather pale & has spoon shaped fingernails.

2 Mrs. Brown, aged 25, complains of poor concentration & memory, being irritable & unable to cope with her 4 month old baby & all the domestic chores. She wakes up early & feels worse first thing in the morning.

3 Mr. Bristow, aged 46, a buying clerk has come at the behest of his wife as he is snoring at night & she cannot bear it any longer. He has given up smoking but it is no better & this has resulted in him putting on 10kgs on his already bulky torso. He is so tired that he sometimes falls asleep at work & he is afraid of being caught by his boss.

4 Mr. James’s tiredness has been coming on over the last 9 months. He is 78 & also complains of pins & needles in the lower limbs in recent weeks & has diarrhoea. His sclera look yellow & his conjunctivae are pale & he has a smooth red tongue. In addition, you detect loss of vibration & joint proprioception. You also think his knee jerks are brisk but you cannot detect any ankle jerks.

5 Mrs. Gray aged 56 has noticed some swelling of the front of her legs. She also says that she feels depressed. Her husband complains that she is looking ‘frumpy’. She wonders if HRT may help.

DCBHA
Tiredness

A  Anaemia
B  Hypothyroidism
C  Infectious mononucleosis
D  Diabetes
E  Carcinoma
F  Chronic fatigue Syndrome
H  Sleep apnoea
I  Iatrogenic

1  A 15 year old female with a 2 day history of pyrexia, complains of headaches, feeling weak & a sore throat. On examination, she was pyrexial, had enlarged cervical & axillary lymph nodes & splenomegaly. There was no weight loss or anaemia.

2  A 30 year old male corporate finance banker complains of tiredness of approximately 7 months duration. Tiredness was not substantially alleviated by rest. Tiredness was “severe” & “disabling” & affected his ability at work. Also complained of muscle pain, joint pain & headache. Examination was unremarkable. On direct questioning there was no alcohol or drug misuse, no polydipsia or polyuria. He was not on any medication. His weight had remained at 75kg with no weight loss.

3  A 55 year old male lorry driver, complains of frequently falling asleep at the wheel of his truck. He has a BMI > 30 & is a heavy smoker. He also admitted to finding it difficult to fall asleep at night & to “putting on a bit of weight” over the past month. Examination was unremarkable.

4  A 45 year old mother of 4 complains of fatigue as well as pain, numbness & tingling in her right hand. She had also noticed her hair had become dry, brittle & thin. She admitted that her weight had increased “quite a bit” over the past few months. On direct questioning she complained of frequently feeling cold & had constipation. On examination she had slow relaxing reflexes & a bradycardia.
Treatment of Cause of Cough

A  Oral penicillin V  
B  Salbutamol inhaler  
C  Steroid inhaler  
D  IV cefuroxime  
E  Opiate  
F  Oral amoxicillin with erythromycin or clarithromycin  
G  Diuretic  
H  Nebulised salbutamol  
I  Simple linctus  
J  Fluids, bed rest  
K  3 months combination antibiotics

For each of the patients below, choose the SINGLE most appropriate treatment from the above list of options. Each option may be used once, more than once or not at all.

1  A 23 year old woman presents with a cough, & shortness of breath for 24 hours. On examination she is distressed, she has a heart rate of 110/min & a respiratory rate of 25/min. She has a widespread bilateral expiratory wheeze.

2  A 30 year old teacher presents to her GP with a cough & shortness of breath, worsening over 48 hours. On examination she has a temperature of 39°C. There is little to find on chest examination, but the chest x-ray shows bilateral shadowing. She has a normal white cell count & abnormal liver function tests.

3  A 40 year old male smoker has had a cough productive of green sputum for 2 weeks & has been pyrexial & short of breath for 24 hours. On examination his temperature is 39.3°C, respiratory rate 35/min, pulse 120/min. There is dullness to percussion & reduced breath sounds at the left base.

4  An 80 year old man presents with a nocturnal cough & white sputum for 2 weeks. There are bilateral basal crepitations on chest examination. The chest x-ray shows an enlarged heart & a small right pleural effusion.

5  A 60 year old man has been diagnosed as having bronchial carcinoma with secondaries. He is distressed by chronic cough.
## Treatment of Diarrhoea

| A | Intravenous saline |
| B | Oral rehydrating fluids |
| C | Ciprofloxacin |
| D | Antispasmodics |
| E | Senna |
| F | Paracetamol |
| G | Doxycycline |
| H | Mesalazine |
| I | Codeine phosphate |
| J | Amoxycillin |
| K | Hemicolecotomy |
| L | Lactulose |
| M | Haemaccel |

For each of the patients below, choose the SINGLE most appropriate initial treatment from the list above. Each option may be used once, more than once or not at all.

1. 84 year old man admitted to A&E with profuse diarrhoea & lethargy for 4 days. Clinical findings included tachycardia, dry tongue & raised urea.

2. A mature 32 year old science student developed profuse diarrhoea & abdominal cramps following a meal from a local Chinese takeaway. 2 days later, stool culture confirmed salmonella & the patient remain unwell.

3. A 24 year old legal secretary with 6 month history of fluctuating diarrhoea & constipation with bloating. No history of weight loss & continued to have normal appetite.


5. A 62 year old man who has recently had chemotherapy for bowel cancer suffers with chronic diarrhoea.

ACDHI
Treatment of Drug & Alcohol Abuse

A Alcoholics anonymous
B Antipsychotic medication
C Aversion treatment
D Controlled drinking
E Disulfiram
F Inpatient detoxification with chlordiazepoxide
G Methadone maintenance treatment
H Motivational interviewing
I Simple advice
J Token economy
K Treatment under Section 3, Mental Health Act 1984

For each case below, choose the SINGLE most appropriate treatment from the above list of options. Each option may be used once, more than once, or not at all.

1 A 32 year old man with a 10 year history of heroin addiction has a string of convictions for theft. He is at risk of HIV & other transmissible diseases due to needle sharing. He wants to stabilise his lifestyle, but does not feel ready to give up opiates.

2 A 43 year old businessman, who has a history of alcohol dependence, has managed to stop drinking. He is afraid of relapsing during a forthcoming business trip & wants help to remain abstinent from alcohol.

3 A 25 year old male student drinks about 4 pints of beer a day every day. He has no symptoms of alcohol dependency or physical problems. He is concerned his level of drinking may be harmful.

4 A 33 year old homeless man drinks a bottle of whisky per day. He has begun to have episodes of amnesia. He wants to stop drinking. When he last tried to give up drinking, he suffered a grand mal convulsion.

5 A 45 year old man would like to have support to give up drinking.
Treatment of Hypertension

A  Thiazide diuretic
B  Beta blocker
C  Calcium channel blocker
D  ACE inhibitor
E  Alpha 1 receptor blocker
F  Angiotensin II receptor blocker
G  Moxonidine
H  Hydralazine
I  Methyldopa
J  Labetalol
K  Sodium nitroprusside

For each of the following patients choose the treatment of FIRST CHOICE from the above list of options. Each option may be used once, more than once or not at all.

1  A 50 year old woman has hypertension & mild asthma with no other medical problems. Mean BP is 170/95.

2  A 60 year old man with claudication is already on bendrofluazide & remains hypertensive.

3  A 40 year old man with diabetes, proteinuria & hypertension.

4  A 30 year old woman who has developed hypertension early in her first pregnancy. She does not have proteinuria or oedema.

5  A 45 year old man has collapsed. He has papilloedema & multiple haemorrhages on fundoscopy. He has proteinuria. CT brain is normal. BP is 250/140.

6  A 30 year old man with hypertension was started on enalapril but has developed a dry cough & refuses to take the drug anymore. He is otherwise well.
Treatment of Poisoning

A  Desferrioxamine  
B  Naloxone  
C  Glucagon  
D  N-acetylcysteine  
E  Hyperbaric oxygen  
F  Activated charcoal  
G  Atropine  
H  Haemodialysis  
I  Supportive treatment  
J  Dicobalt edetate  
K  Gastric lavage

For each case below, choose the SINGLE most appropriate treatment from the above list of options. Each option may be used once, more than once or not at all.

1  A 37 year old man is admitted within 1 hour of accidentally ingesting liquid paraquat. He complains of diarrhoea & painful mouth ulcers.

2  A 15 year old girl presents with sweats & hyperventilation after taking a large number of salicylate tablets. She has severe metabolic acidosis.

3  A 26 year old woman collapses after a massive overdose of atenolol. So far, she has not responded to intravenous atropine & remains in cardiogenic shock.

4  A pregnant 30 year old woman is found drowsy in her rented flat. She complains of severe nausea for the last 3 hours. Her carboxyhaemoglobin level is 41%.

5  A 25 year old man is delirious & hyperpyrexial after taking a tablet at a dancing club. He is hyperreflexic & has a serum sodium of 130mM.
Type II Diabetic Treatments

A  Metformin (oral biguanide)
B  Gliclazide (oral sulphonylurea)
C  Acarbose (& glucosidase inhibitor)
D  Rosiglitazone (peroxisome proliferates – activated receptor)
E  Repaglinide (insulin secretagogue)
F  Diet & exercise
G  Insulin
H  Glucagon

1  A 60 year old NIDDM presents with gradually worsening diabetic control despite maximum oral medication. He has ketones in the urine & is unwell.

2  An overweight 45 year old man who was diagnosed with NIDDM x months ago still has glucose fasting of 11 & HBA1C of 8.8%.

3  A 56 year old man with NIDDM who is on maximum therapy of gliclazide needs higher control but is unable to tolerate metformin or acarbose.

4  A 15 year old IDDM is shaky, sweaty, trembley & pale & then faints. Bmstix = 2mmol/l.

5  A 52 year old man with NIDDM is on maximum therapy with metformin. He has recurrent hypos on oral sulphonylureas. He has particular problems with raised postprandial glucose & tried acarbose, which gave him terrible side effects.

6  A 26 year old pregnant lady at the end of her pregnancy develops gestational diabetes.

7  A 53 year old man who is fit & well has a check up & is found to have glycosuria. Fasting glucose is 8.4mmol/l & HBA1C is 6.5%.

8  A 26 year old alcoholic IDDM is found in a coma & taken to hospital. Blood glucose is 28mmol/l.
Urinary Symptoms

A  Renal artery stenosis  
B  Benign prostatic hypertrophy  
C  Bladder carcinoma  
D  Cystitis  
E  Renal calculus  
F  Glomerulonephritis  
G  Chronic renal failure  
H  Prostate carcinoma  
I  Adult polycystic kidney disease  

Match the patient description with one of the above diagnoses

1  A diabetic man appears pale & very unwell. His skin is itchy & bruised. He began noticing that he was urinating more at night & had been feeling very tired, weak & breathless. He also has oedema in his lower limbs & bone pain.

2  An 80 year old man has nocturia & a delay in initiation of micturition. He also has terminal dribbling. A renal ultrasonography shows no problems with his kidneys.

3  A 25 year old female sees her GP. She started experiencing a severe scalding pain at the beginning of urination & there was blood present. The pain is across her lower abdomen. She has no fever or other systemic problems.

4  A 55 year old woman complains of the sudden onset of a dull pain that radiates to her groin. She is very restless but movement only increases her pain. The pain has lasted for many hours. She has blood in her urine. She last visited her GP with malaise & bone pain.

5  A female complains of abdominal discomfort & haematuria. She says her mother died of kidney problems. On palpation, her kidneys are nodular. She has high blood pressure & often gets urinary tract infections.
Valvular Heart Disease

A  AR
B  MR
C  AS
D  MS
E  M prolapse
F  PR
G  TR
H  PS
I  TS
J  Prosthetic R
K  Prosthetic S

1  Pt with Hx of Mi 1 yr prior CO SOB & fatigue. The pt’s pansystolic murmur radiates into the axilla.

2  IVDU presents with fever & swollen ankles. OE pt has pulsatile hepatomegaly & pansystolic murmur, best heard at lower sternal edge upon inspiration.

3  OE pt has Corrigan’s sign, De Musset’s sign, Quincke’s sign & Ducosier sign - & for those that need it, pt also has collapsing pulse.

4  Pt presents with collapse on exertion. Pt known to have ‘common problem with valve’ since birth. Slow rising pulse is the giveaway.

5  Pt admitted with SOB & chest pain. Echo reveals normal LV function. Pt admits to Hx of rheumatic fever. Malar flush is evident on pt’s face.

6  Pt presents with palpitations. On auscultation, there is a med-systolic click & a late systolic murmur. ECG reveals T-wave inversion in the II, III & a VF.

7  35 yr old pt, newly diagnosed with Fallot’s tetralogy, presents with epistaxis.
Venous Disease

A  Venous thrombosis  
B  Varicose veins of the long saphenous system  
C  Thrombophlebitis  
D  Deep venous thrombosis  
E  Acute ischaemia  
F  Inguinal hernia  
G  Primary lymphoedema  
H  Cellulitis  
I  Ruptured Baker’s cyst  
J  Secondary lymphoedema  
K  Varicose veins of the short saphenous system  
L  Saphena varix

For the following patients please choose the most appropriate diagnosis from the list above

1. A 30 year old male rugby player comes to an outpatient clinic complaining that his “legs look ugly”. He has noticed that this change has occurred over the past couple of years. On examination both calves are slightly oedematous & erythematous. The Trendelenburg test revealed no sapheno-femoral valve incompetence. The dilated veins followed a tortuous path from the heel to the popliteal fossa.

2. A 40 year old mother of 3 presents to her GP complaining of a lump in her groin. On examination the lump was situated approximately 3cm lateral to the pubic tubercle & had a slight bluish tinge to it. There was a positive cough impulse & the lump disappeared on lying down.

3. A 20 year old woman presents to the vascular outpatient clinic with a 12 month history of slowly progressing non-painful swelling of both lower limbs. She is otherwise well & has no significant past medical history. She thinks that her grandmother also suffered from swollen legs. Cardiovascular, abdominal & pelvic examination, including examination of the inguinal lymph nodes are all normal.

4. A 35 year old post partum woman develops acute swelling of her left leg & thigh. She had a normal delivery, but during the later stages of her pregnancy she complained of bilateral lower leg swelling. On examination there is tense swelling of her thigh & leg, the skin is hot & there is some deep tenderness over the calf. An ultrasound scan revealed a non-compressible femoral vein.

5. A 70 year old male smoker returns to casualty 2 weeks after he suffered a MI. This time he presents with a painful right lower limb. On examination the calf is red & cold & only the femoral pulse could be palpated. The other pulses were absent.