

EMQs for Medical Students

 Weight Loss A Hyperthyroidism B Diabetes Mellitus C Addison's disease D Malabsorption E Malignancy F Renal failure G Depression H Anorexia nervosa I HIV J Tuberculosis K Cardiac failure L Liver failure M Helminthic worms 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. A 19 year old student complaining of amenorrhoea for 9 months. Weight loss, generalised weakness & depression. A 45 year old woman, very anxious, hand tremors & loose stools. A 17 year old man returning from holiday in Africa. He presents with abdominal pain, tiredness & peri-anal itching. Blood film showed eosinophilia. A 70 year old man with a history of 10kg weight loss over the previous 3 months. More recently, he developed acute lower back pain. Presents to A&E with coughing & sputum. Chest x-ray shows left lower lobe pneumonia. A 25 year old woman with fatigue & weight loss. She gives a history of frequent loose stools with abdominal pain. Full blood count revealed iron deficiency anaemia. A 40 year old unmarried actor has noticed recent weight loss. Although he attributed this to stress you are concerned when you detect generalised lymphadenopathy. Blood count shows neutropenia & lymphopaenia. HAMED I Abdominal Pain A Uteric colic B Typhoid C Aortic aneurysm D Acute pancreatitis E Gall stones F Peptic ulcer G Ruptured ectopic pregnancy H Appendicitis I Sickle cell crisis J MI What is the most likely diagnosis? An 18 year old man presents with severe right iliac fossa pain which has been present for about 24 hours although he thinks the pain may have started more centrally. He says he is nauseous & has vomited several times. He has a fever & his heart rate is 110bpm A 42 year old homeless man presents in A&E with left sided abdominal pain which radiates to the back. He appears jaundice & smells of alcohol. A 49 year old man presents with severe right abdominal pain which radiates to the groin. His English is very poor & he is unable to give a very good history. He appears very anxious, in a great deal of pain & is unable to get comfortable in any position. An abdominal x-ray appears entirely normal. A 19 year old student presents with abdominal pains. She has just returned from her gap year in which she went backpacking across India with some of her friends. She also complains of being constipated & is suffering from a "dry cough". On examination she has an enlarged spleen. A 68 year old obese Asian man presents with severe upper abdominal pain & nausea. He is sweaty & says he cannot get his breath. The abdomen looks normal & there are no palpable masses. A full blood count is ordered but the results are not yet available. HDABJ Abdominal Pain A Colonscopy B Ultrasound abdomen C Stool examination for pathogens D Barium meal E Gastroscopy F Barium enema G History only H H. pylori antibodies I Serum amylase J Full blood count, ESR, creatinine, electrolytes & liver function tests Which single investigation is the most appropriate to confirm the likely diagnosis in the patients described below? A 70 year old smoker who has a 6 week history of epigastric discomfort worse on eating. He has lost his appetite as he has a sense of fullness all the time & has lost 3 kilos in weigh. Abdominal examination is unremarkable. A 45 year old unmarried labourer who increasingly severe central abdominal pain over the last 3 hours. The pain radiates through to his back & makes him vomit. He has no previous history. On examination is cold & sweaty, pulse 120, BP 90/70, & has guarding over his whole abdomen. A 20 year old secretary who complains of abdominal discomfort & bloating over the last 3 months. She also has intermittent diarrhoea, but when she opens her bowels, her symptoms are relieved. There is no blood or mucus in her stools. Abdominal & rectal examination is normal. A 50 year old housewife & mother of 5 has sudden severe epigastric pain that radiates to the back on the right & has vomited. She puts it down to her recent meal of fish & chips, as she usually never eats fatty food. Examination is somewhat difficult as she is obese but you think she has some guarding over the epigastium 7 right hypochondrium. A 25 year old previously well man who has a 3 day history of abdominal cramps diarrhoea with bloody stools 5 or 6 times a day. Examination shows a soft but tender abdomen. EIGBC Abdominal Pain (Anna Radford) A Biliary colic B Acute pancreatitis C Gastric ulcer D Duodenal ulcer E Renal colic F Leaking abdominal aortic aneurysm G Acute appendicitis H Crohn's disease I Bowel obstruction J Ulcerative colitis K Chronic pancreatitis 30 year old man admitted via A&E complaining of right iliac fossa pain, diarrhoea & weight loss worsening over several weeks. Laparotomy revealed an oedematous, reddened terminal ileum. 80 year old lady with severe left/right sided pain radiating through to loins & back. Found collapsed at home thought, to be due to the pain. Smoker. Epigastric pain associated with dyspepsia, worse at night & when the patient is hungry. 26 year old male, stab wound victim, operated on for a ruptured spleen & dissected kidney (due to knife wounds) presenting post op with severe epigastric pain, radiating to the back between the scapulae. Associated with nausea & vomiting. 4 year old boy, profuse vomiting, no motions, for 2 days, severe abdominal pain which is intermittent in nature. Abdomen distended with increased bowel sounds – high pitched in nature. HFDBI Acute Abdominal Pain A Diverticulitis B Perforated peptic ulcer C Small bowel obstruction D Aortic dissection E Ruptured aortic aneurysm F Ruptured ectopic pregnancy G Acute cholecystitis H Acute pancreatitis I Mesenteric infarction J Meckel's diverticulum For each patient presenting with acute abdominal pain, select the most likely diagnosis A 70 year old man presents with a 2 day history of constipation, anorexia & pain in the left iliac fossa. On examination, he is pyrexial 37.60C & there is localised tenderness & rebound in the left iliac fossa. White blood cell count is 14.0x10⁹/l. A 50 year old man presents with a 24 hour history of sudden onset of severe epigastric pain, which has now become generalised. On examination, he has pyrexia of 37.80C, a rigid abdomen & absent bowel sounds. White blood cell count is 18.09/l. Serum amylase is raised at 450IU/L. An x-ray of his abdomen shows opacities in the right hypochondrium & gas under the diaphragm. A 70 year old woman presents with a 2 day history of colicky abdominal pain & a 24 hour history of vomiting. On examination, there is abdominal distension, visible peristalsis & a mid-line laparotomy scar. Bowel sounds are tinkling. ABC Acute Breathlessness A Left ventricular failure B Pulmonary embolus C Anaphylaxis D Viral pneumonia E Asthma F

Pneumothorax G Inhaled foreign body H Exacerbation of COPD I Epiglottitis J Acute anxiety Match the patient description with one of the above diagnoses A 38 year old woman with a history of multiple allergies is given intravenous contrast medium for a urogram. Within a couple of minutes, she has become breathless, with wheeze & stridor, & her blood pressure is 80/40 mmHg. A 69 year old man with a history of hypertension & stable angina wakes up severely short of breath. He is slightly more comfortable sitting upright. On examination, his blood pressure is 195/115 mmHg & there are crepitations at the bases of both lungs. A 73 year old woman is recovering in hospital 3 days after an operation to replace her right hip. On going to the toilet she suddenly becomes extremely short of breath & rapidly loses consciousness. Blood pressure is 60/20 mmHg. A 77 year old former coal miner has 30 year history of cough, mostly productive of sputum. He suddenly becomes breathless after a bout of coughing & complains of right sided chest pain. On examination, he is cyanosed, the trachea is deviated to the left & no breath sounds are audible over part of the right side of the chest. CABF Anaemia A Acute blood loss B Chronic blood loss C IDA D Anaemia of chronic disease E Chronic renal failure F Sickle cell anaemia G B12 malabsorption H Thrombocytopenia I Haemolytic anaemia J Polycythaemia rubra vera What is the most likely diagnosis? A 46 year old Indian vegetarian man with a past history of ileal resection for Crohn's Disease presents with an Hb of 11.6g/dl & a MCV of 110fl. A 23 year old vegetarian woman presents to her GP with fatigue. She has 2 children aged 2 & 3 & since her last pregnancy she has suffered from very heavy menstrual bleeding. FBC revealed: WBC 5.2x10⁹/l (3.5-10.8) RBC 3.42x10¹²/l (3.82-4.98) Hb 8.0g/dl (11.5-14.8) MCV 75fl (84-99) MCH 23.3pg (27.5-32.7) Ferritin 8umol/l (15-300) A Nigerian child aged 2 presents to A&E crying with pain. On examination he is found to have swollen fingers & faint jaundice. The child's blood count shows a WBC & neutrophil count that are higher than expected for an African child. A 72 year old man presents with left hemiplegia of sudden onset. On examination, he appears plethoric & his spleen is felt 3cm below the left costal margin. He appears normally hydrated. FBC reveals: WBC 23x10⁹/l Hb 18.2g/dl Platelet count 614 x10⁹/l A 67 year old man presents to his GP complaining of lethargy & weight loss. Rectal examination revealed a palpable irregular mass in the rectum. GCFJB Anaemia A Anaemia of chronic disease B Blood loss C Coeliac disease D Dietary folic acid deficiency E Glucose-6-phosphate dehydrogenase deficiency F Haemolytic uraemic syndrome G Hereditary spherocytosis H Hypersplenism I Iron deficiency J Pernicious anaemia K Sickle cell anaemia L Sickle cell trait M Thalassemia major N Vitamin C deficiency For each patient with anaemia, select the most likely diagnosis. A 62 year old woman with RA is taking prednisolone & NSAIDs for RA. She is admitted to a casualty department with the sudden onset of weakness & faintness. She feels nauseated & is hypotensive. Hb is 8g/dl. A 17 year old Northern European Caucasian girl has a normocytic normochromic anaemia with a low ferritin, low serum B12 & low red cell folate. A Schilling test shows malabsorption of vitamin B12 which is not corrected by intrinsic factor. A 32 year old pregnant West African woman has an Hb of 10.2g/dl, a normal MCV & a positive sickle solubility test. Haemoglobin electrophoresis shows 45% haemoglobin S & 55% haemoglobin A. A 66 year old alcoholic man has a firm irregular liver, testicular atrophy, splenomegaly, a normocytic normochromic anaemia & thrombocytopenia. BCLA Anorectal Disease A Intussusception B Prolapse C IBS D IBD E Pilonidal sinus F Abscess G Fissure H Fistula I Haemorrhoids An 82 year old female presents with a large lump which appears at the anus after defecation, & spontaneously on coughing. The lump is uncomfortable & the patient has tenesmus. She also has incontinence & has noticed mucus PR. A 20 male presents with painful defecation which persists for 30mins afterwards. The stool is smeared with blood, & he has noticed recent constipation. A 50 female presents with a purulent discharge from the anal region & has recurrent episodes of pain, which is intense & throbbing. O/E pruritis ani. 40 male presents with PR bleeding & a palpable lump from anus, with associated mucus discharge. There is blood splashed around lavatory pan. BGFJ Biochemistry A Paget's disease B Hypercalcaemia C Hyperkalaemia D Osteoporosis E Hypocalcaemia F Hypernatraemia G Low serum zinc H Hypokalaemia I Osteomalacia J Hyponatraemia 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. A 50 year old lady on Bendrofluazide presents with confusion & fits. A 30 year old unconscious man with diarrhoea & 30% burns. The ECG of a 20 year old insulin dependent diabetic man showed tall tented T-waves & widened QRS complexes. A 20 year old lady who took excessive amounts of laxatives presents with cramps & muscle weakness. A 50 year old lady developed carpo-pedal spasm whilst having her blood pressure measured. 2 years previously she had a total thyroidectomy. A 60 year old man with anorexia, tiredness, abdominal pain & weight loss. He also has a low potassium & raised serum alkaline phosphatase. A 50 year old alcoholic man with red, crusted lesions around both nostrils & at the corners of his mouth. A 55 year old lady with multiple sclerosis who is confined to her wheelchair. She also suffers from severe asthma & sarcoidosis. A deaf 70 year old man presented with CCF. He mentioned to his GP that his hats had become too small to fit his head. A 60 year old epileptic man with renal failure was seen in the local A&E department with a fracture of the neck of his right femur. JFCHEBGDAI Breast A Ca breast B Nodularity C Mastalgia D Fibroadenoma E Breast abscess F Ductal papilloma G Pregnancy H Brodie's disease 23 city female PC: tense heavy uncomfortable breast, prickling sensation deep inside breast. She has noticed enlargement & breast feels lumpy & subcut. veins are dilated. Skin of breast is warm. 17 school girl, PC: pain, changed from dull ache to severe continuous throbbing pain. Breast feels hot on palpation, & she CO hot flushes. OE whole breast tender & engorged & nipple is tender. 20 car sales woman PC with non-painful lumps. OE unremarkable, except for a 5cm smooth bosselated firm mass, highly mobile. 40 female, PC with lump in breast, enlargement of breast, no pain. Hx of lump fluctuating in size. OE, lump is found in upper outer quadrant, moderate hard & mobile & lacks skin or deep attachment. GEDI

Breast Cancer A The first most appropriate invasive investigation is fine needle aspirate of the breast lesion B The first most appropriate invasive investigation is a fine needle aspirate of the lymph nodes C Axillary lymph node metastases D Estrogen receptor positivity E Lack of aneuploidy F Paget’s disease G Fibroadenomas H Fibrocystic disease I Infiltrating ductal carcinoma For each patient below, select the SINGLE most appropriate option from the list of options above. A 20 year old female finds a mass in her right breast. Her GP notes that this 1 to 2cm mass is firm but moveable & sends her to the one stop breast clinic. After ultrasound she has another procedure. A firm 2 to 3cm mass is palpable in the upper outer quadrant of the right breast of a 52 year old woman. There are palpable axillary nodes. After a mammogram, which shows a focus of microcalcification, she has another procedure. Breast carcinoma is diagnosed on biopsy of the right breast of a 52 year old female. Which feature of her carcinoma after a definitive operation & histology suggests a worse prognosis? A 61 year old female has noted a rough, reddened appearance of the nipple which persists despite application of a corticosteroid cream. The most likely cause of this “persistent eczema”? In women of reproductive age the most likely cause of a palpable breast “lump” is? ABCFH Breast Disease A Breast carcinoma B Fibroadenoma C Breast abscess D Benign cyst E Duct ectasia F Paget’s disease G Abnormality of normal development & involution H Fat necrosis I Mastitis J Gynaecomastia K Bruising 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. A 40 year old obese woman presents with a long history of pain in both breasts. This is worse just before her period starts. She is also taking omeprazole for GORD. A 19 year old girl has noticed a lump in the right breast. It is smooth, 2cm in diameter, non-tender, & highly mobile. A 30 year old lady, who is breast feeding, has developed an extremely painful, hard, red 4cm lump at the edge of the left nipple. A 65 year old lady has noticed a 3cm lump behind the right nipple. It is hard, non-tender, mobile & has an irregular edge. She has had a small amount of bloody nipple discharge. A 50 year old extremely obese lady presents with a tender, hard, 3cm lump in the left breast which has appeared quite rapidly. She remembers knocking the breast against a table edge 1 month ago. IBCAH Breast Disease A Fibroadenoma B Breast cyst C Fibroadenosis D Breast abscess E Duct ectasia F Carcinoma of the breast G Lipoma H Sebaceous cyst I Gynaecomastia 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. A 40 year old lady with multiple painful lumps in her breast, which are painful & tender premenstrually. A 25 year old lady with a discrete, non-tender, mobile lump in one breast. A 35 year old lady is generally unwell with a tachycardia & a fever. A segment of the right breast is painful, tender, red & warm. A 14 year old boy with bilateral breast enlargement. A 40 year old lady with a green nipple discharge & tender lumpiness beneath the areola. A 50 year old man with a painless enlargement of the left breast. A 40 year old lady with a hard lump in the right breast. The skin overlying the lump has an orange peel appearance. CADIEIF Breathlessness on Exertion A Bronchopneumonia B IDA C Congestive cardiac failure D Pulmonary tuberculosis E Sarcoidosis F Pulmonary embolus G AML H COAD I Pulmonary fibrosis J CLL Match the description of the patient with the most likely diagnosis A 70 year old retired boilermaker gives a 5 year history of exertional dyspnoea, & a dry cough. The patient is a non-smoker. On examination, fine crackles are heard at the base of both lung fields. A 25 year old HIV positive man who has had a productive cough for the last 3 months with haemoptysis & night sweats. Chest x-ray shows hilar lymphadenopathy. 18 year old man who has become increasingly tired over the last month. On examination he looks pale, has a large bruise over his right thigh & a firm palpable liver & spleen. A 60 year old publican who smokes 20 cigarettes a day. He has a 10 year history of having a ‘smokers morning cough’ when he expectorates clear sputum. This is worse in the winter when it sometimes turns green & he has to go to his general practitioner for antibiotics. On examination, he has poor air entry over both lung fields & his Peak Expiratory Flow Rate is 210l/min (reduced by 80%). A 35 year old lady with shortness of breath & tiredness over 6 weeks. She had decided to consult her doctor when multiple mauve lesions 1-3cms in diameter appeared over both shins. Chest x-ray shows hilar lymphadenopathy. IDGHE Calcium Metabolism A Primary hyperparathyroidism B Hypercalcaemia of malignancy C Osteomalacia D Osteoporosis E Hypoparathyroidism F End stage renal failure G Paget’s disease H Immobility I Sarcoidosis J Myeloma For each set of blood results below, choose the SINGLE most likely diagnosis from the above list of options. Each option may be used more than once or not at all. 1 Ca2+ 2.0mmol/l PO43- 1.0mmol/l PTH 100pg/ml AlkP 250U/l 2 Ca2+ 3.5mmol/l PO43- 0.8mmol/l PTH 120pg/ml AlkP 100U/l 3 Ca2+ 2.0mmol/l PO43- 1.2mmol/l PTH 200pg/ml AlkP 200U/l 4 Ca2+ 2.5mmol/l PO43- 1.2mmol/l PTH 40pg/ml AlkP 800U/l 5 Ca2+ 3.5mmol/l PO43- 1.2mmol/l PTH <10pg/ml AlkP 80U/l 6 Ca2+ 2.3mmol/l PO43- 1.2mmol/l PTH 30pg/ml AlkP 90U/l Normal Ranges Ca2+ 2.0mmol/l PO43- 1.0mmol/l PTH 100pg/ml AlkP 250U/l DAFGBE Cardiac Dysrhythmias A Third degree heart block B Ventricular fibrillation C Atrial flutter D Ventricular tachycardia E Second degree heart block F Supraventricular tachycardia G Atrial fibrillation H Sinus tachycardia Which of the above best describes the ECG tracings shown? AGHDC Cardiovascular Examination: Signs & Symptoms A Atrial fibrillation B Left ventricular failure C Decubitus angina D Myocardial infarction E Congestive cardiac failure F Subacute endocarditis G Unstable angina H Stable angina A 62 year old gentleman presents with fatigue, breathlessness & anorexia. On examination his JVP is noted as being elevated, he has hepatomegaly & swollen ankles. A 55 year old gentleman with a history of systemic hypertension presents to A&E with breathlessness on exertion & orthopnoea. Examination reveals cardiomegaly & a displaced apex beat to the left. A diabetic, 66 year old lady presents to A&E with breathlessness, sweating, nausea & vomiting. She is feeling very distressed. She has no pain. On inspection she appears pale, sweaty & grey. A 49 year old man presents to A&E with a 2 week history of a ‘tight’ central chest pain radiating to the jaw experienced when he is lying down. A 45

