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THE MEDIC COLLECTIONS: INTERNAL MEDICINE

Demonstration edition



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PREAMBLE

THE MEDIC COLLECTIONS is a project by the students of medical school for the students of medical school. The hope is that revision can be made more efficient across all medical school by making it more orderly and coordinated. To help in any way, you can get in touch with any the contacts listed below.

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FOURTH YEAR 2013 MCQ

1. A patient presents with oral lesions for 1 month. He has flaccid vesicles and bullae on the trunk and limbs. Nikolsky sign is positive. The MOST likely diagnosis is:-

- Erythema multiforme major
- Mucous membrane pemphigoid
- Bullous pemphigoid
- Pemphigus foliaceus
- Pemphigus vulgaris

2. A 25 year old man with history of HIV disease presents with a history of chronic headache. Neurological examination is normal. CT scan reveals a contrast enhancing ring lesion on the left parietal lobe. The MOST appropriate approach would be:-

- Biopsy the lesion
- Start patient on steroids
- Start patient on empirical antibiotics
- Start patient on empirical anti-toxoplasmosis treatment
- Start patient on intravenous acyclovir

3. The following are the results of cerebrospinal fluid (CSF) obtained from a 40 year old man with meningitis

- Protein 100mg/l
- Glucose 1mmol/l
- White cell count 2000 cells/ μ l, predominantly lymphocytes
- Gram stain negative

These findings are compatible with:-

- Pyogenic meningitis
- Viral meningitis
- Tuberculous meningitis
- Sarcoidosis
- Cryptococcal meningitis

4. Which one of the following is the MOST important attribute necessary for a screening test?

- Sensitivity
- Specificity
- Positive predictive value (PPV)
- Negative predictive value (NPV)
- Receiver-operator curve (ROC)

5. All of the following statements regarding *Plasmodium falciparum* are true EXCEPT-

- It causes more severe disease in pregnancy
- It is associated with recurrent relapses after effective initial treatment
- It is the only malarial parasite causing greater than 20% parasitaemia
- Infection is associated with thrombocytopenia
- It is the only cause of cerebral malaria

6. In a patient with anaerobic, 24-hour albumin excretion of 8g and normal glomerular filtration (GFR), the following complications are expected EXCEPT-

- Hypercoagulability
- Metastatic calcification
- Allosterosis
- Susceptibility to infections
- Hypouricemia

7. A 60 year old man presents to his doctor for a medical check. He is found to have a random blood sugar (RBS) of 7mmol/L. An oral glucose tolerance test (OGTT) done showed fasting blood glucose of 6.2 mmol/L, 2 hour post glucose load of 14.4 mmol/L. Which of the following statements is TRUE regarding his patient?

- He has diabetes mellitus
- He has impaired glucose tolerance
- He has metabolic syndrome
- He should have fasting lipid assay to determine the diagnosis
- Another OGTT should be done in 6 months to determine his diagnostic status

8. A 22 year old man presents to the emergency department with a 3 day history of fever, cough and pleuritic chest pain. His temperature is 39°C, pulse rate is 110 beats/min and respiratory rate is 26 beats/min. Chest radiograph reveals an opacity in the right lower lung zone. Which of the following is the MOST common cause of the condition?

- Candida albicans*
- Pseudomonas aeruginosa*
- Adycephlamni pneumoniae*
- Staphylococcus aureus*
- Streptococcus pneumoniae*

9. A 12 year old boy develops migratory joint pain involving large joints 2 weeks after a sore throat. He has a tachycardia of 110 beats/min, and a systolic murmur at the apex. Which of the following statements is TRUE concerning his clinical presentation?

- The micro-organism causing the sore throat is likely to be *Streptococcus aureus*
- Blood cultures usually yield the offending organism
- The heart involvement is usually pancarditis
- Erythema nodosum is expected
- Shortened PR interval is found on the electrocardiogram (ECG)

10. A 20 year old man presents with 3 months history of bloody mucoid diarrhea. Colonoscopy shows diffuse erythema and ulcerations in the entire colon and patchy ulceration in the terminal ileum. The MOST likely diagnosis is:-

- Ulcerative colitis
- Crohn's disease
- Amoebic colitis
- Shigellosis
- Tuberculous enteritis

21. All of the following auscultatory findings are expected in mitral stenosis EXCEPT:
- A. Mid-diastolic murmur
 - B. Soft first heart sound
 - C. Presystolic-murmur accentuation
 - D. Opening snap
 - E. Loud second heart sound
22. A patient presents with massive haematemesis for 1 day. Endoscopy reveals acutely bleeding oesophageal varices. All of the following treatments would be recommended EXCEPT:
- A. Sclerotherapy
 - B. Propranolol infusion
 - C. Octreotide infusion
 - D. Nasogastric tube insertion
 - E. Band ligation
23. A 25 year old woman presents with erosion, weeping and crusted lesions on 30% body surface area. The plan of management should include all of the following EXCEPT:
- A. Septic screen
 - B. Saline soaks
 - C. Infection control
 - D. Keep warm
 - E. Emollients
24. A 58 year old man with HIV develops a vesicular eruption along the left side of the ribcage. The eruption is preceded by days of tingling and burning sensation. Which one of the statements is TRUE regarding the condition?
- A. Corticosteroids should be started immediately
 - B. Early acyclovir reduces the duration of symptoms
 - C. Previous *Herpes simplex* virus infection is associated with this presentation
 - D. Disappearance of the rash is associated with disappearance of symptoms in all the patients
 - E. Acyclovir has no role in the management of this condition
25. A 50 year old man presents with history of wasting of the small muscles of the hand associated with dysphagia and dysphagia. Examination reveals spastic immobile tongue, wasted muscles of the hands with increased deep tendon reflexes. All of the following statements are true regarding the condition EXCEPT:
- A. Autosomal dominant inheritance
 - B. Cause of death is usually respiratory
 - C. Is associated with myasthenia
 - D. Sphincter involvement is a late complication
 - E. Sphincter involvement is a late complication

16. All of the following are diagnostic criteria for polymyositis EXCEPT:
- A. Elevated creatine kinase
 - B. Proximal muscle weakness
 - C. Myopathic electromyogram (EMG)
 - D. Typical changes on muscle biopsy
 - E. Heliotropic rash
17. A 13 year old boy presents with long-standing mild jaundice, moderate pallor and moderate splenomegaly. The MOST likely diagnosis is:-
- A. Sickle cell anaemia
 - B. Non-todogkin & lymphoma
 - C. Phthalassaemia
 - D. Chronic myeloid leukaemia
 - E. Myelofibrosis
18. A 56 year old man presents with severe low back pain, lumbar spine tenderness and general illhealth. He has pallor and mild ankle oedema. Investigations show haemoglobin 9g/dl, MCV 80fl, ESR 110mm/hr serum albumin 30g/l, total protein 130g/l. Xrays show compression fracture L3 to L5 and osteolytic lesions in the pelvic bones. Common causes of renal failure in this condition include all the following EXCEPT:
- A. Nephrogenic bladder
 - B. Hypercalcaemia
 - C. Hyponatraemia
 - D. Proteinuria
 - E. Hyperepranathryolism
19. A 28 year old woman is followed up for thyrotoxicosis. She is on antithyroid medication. Which one of the following clinical parameters will closely reflect her thyroid hormone status?
- A. Emotional variability (moods)
 - B. Menstrual patterns
 - C. Palpitations
 - D. Sleep patterns
 - E. Weight
20. All of the following interventions are beneficial in the management of patients with chronic obstructive airway disease (COAD) EXCEPT:
- A. Pneumococcal vaccination
 - B. Cessation of smoking
 - C. Short acting bronchodilators
 - D. Inhaled anticholinergics
 - E. High tension oxygen therapy

32. All of the following findings are compatible with a diagnosis of *Pneumocystis jirovecii* pneumonia EXCEPT:-
- ↑ Elevated white blood cell count
 - Low CD4 count
 - ↑ Elevated lactate dehydrogenase(LDH) in blood
 - Marked hypoxia on arterial blood gas analysis
 - Barrettly appearance on chest radiograph
33. A 65 year old man complains of palpitations. ECG shows irregular QRS complexes with absent P-waves. The diagnosis is :-
- Atrial flutter
 - Atrial ectopics
 - Atrial fibrillation
 - Heart block
 - Ventricular fibrillation.
34. A 25 year old man is diagnosed with chronic hepatitis B infection. He has high hepatitis B virus (HBV) DNA at 100 million IU/ml. All of the following investigations would be required before initiation of treatment EXCEPT:-
- Liver function tests (LFT)
 - Hepatitis B e antigen (HBeAg) test
 - Hepatitis B core antigen (HBcAg) test
 - Hepatitis C virus screen
 - Thyroid function tests (TFTs)
35. A 30 year old man presents with scaly papules and plaques. The differential diagnoses include all the following EXCEPT:-
- Lichen planus
 - Psoriasis vulgaris
 - Discoid dermatitis
 - Pityriasis rosea
 - Morphea
36. A HIV positive woman has generalized cervical lymphadenopathy. Fine needle aspiration (FNA) cytology confirms tuberculous aetiology. Her CD4 count is 60 cells/ μ l. She is started on antituberculous treatment and HAART simultaneously. 4 weeks later she develops fever and increasing enlargement of the lymph nodes. Which one of the following would be the CORRECT approach to her management?
- Stop the anti-tuberculous therapy
 - Stop the anti-retroviral therapy
 - Start on prednisone immediately
 - Add a broad spectrum antibiotic
 - Give an antipyretic and continue therapy

26. You notice in the locker room one of your colleagues injecting himself with insulin. What would be your MOST appropriate actions?
- Report to the supervisor
 - Counsel your colleague yourself
 - Pretext you did not see him
 - Ask your senior colleague to talk to him
 - Report him to the director of the hospital
27. A 28 year old man presents with painful micturition and a purulent urethral discharge for 2 days. Which one of the following is NOT an appropriate drug for his treatment?
- Ciprofloxacin
 - Ceftriaxone
 - Amoxicillin
 - Azithromycin
 - Doxycycline
28. Which one of the following is NOT a feature of fibromyalgia?
- Anxiety
 - Fatigue
 - Irritable bowel syndrome (IBS)
 - Scleritis
 - Sleep disturbance
29. A 30 year old man presents with general body weakness. Physical examination reveals pallor and koilonychia. Which one of the following is the MOST likely positive laboratory finding?
- Presence of *Taenia saginata* ova in his stool
 - Increased faecal stercohilinogen
 - Reticulocyte volume (MCV) of 59fl
 - Reduced total iron binding capacity (TIBC)
30. Which one of the following renal disease is well matched to renal imaging findings?
- Chronic glomerulonephritis - bilateral contracted echogenic kidneys
 - Obstructive uropathy - ectopic kidneys
 - Chronic pyelonephritis - enlarged globular kidney
 - HIV nephropathy - bilateral small scarred kidneys
 - Acute tubular necrosis - dilated calyces.
31. The metabolic syndrome is defined by the presence of all the following characteristics EXCEPT:-
- Abdominal obesity
 - Hypertension
 - High high-density lipoprotein(HDL) - cholesterol
 - Hypertriglyceridemia
 - Impaired glucose tolerance

42. Which one of the following disease process is well matched with the renal manifestation?

- A. Syphilis – obstructive uropathy
- B. ~~C.~~ *Plasmodium malariae* infection – nephritic syndrome
- C. Systemic lupus erythematosus – acute tubular necrosis
- D. ~~E.~~ *Schistosoma haematobium* infection – Fanconi syndrome
- E. Rheumatoid arthritis – acute glomerulonephritis

43. A 46 year old man with diabetes presents with right foot ulceration without gangrene. It is septic with malodorous smell. 10^6 CFU is 8.5% dorsalis pedis pulses are good. *Staphylococcus aureus* and *Klebsiella sp.* have been isolated from the wound swab. The following actions are appropriate EXCEPT:-

- A. Daily hydrogen peroxide soaks
- B. ~~C.~~ Intravenous antibiotics
- C. Daily saline soaks
- D. Platelet – derived growth factor dressing
- E. Insulin therapy

44. A 65 year old man with 25 pack years of smoking presents with cough, weight loss and breathlessness. A chest radiograph shows a right apical homogeneous round opacity. All of the following findings are known to be associated with this presentation EXCEPT:-

- A. Hypertrophy/ enlargement of the palms
- B. ~~C.~~ Radicular pain to the right hand
- C. Hypocalcaemia
- D. Hoarseness of the voice
- E. Haemoptysis

45. A patient presenting with non-ST elevation acute coronary syndrome will benefit from all of the following therapeutic interventions EXCEPT:-

- A. Thrombolysis
- B. ~~C.~~ Combined elonidrogel and aspirin therapy
- C. Ixabiparin therapy
- D. Beta-blocker therapy
- E. Nitrate

46. A 70 year old man presents with generalized pruritis and weight loss. Clinical examination reveals green jaundice and a palpable non-tender gall bladder. Which of the conditions listed below is the MOST likely diagnosis?

- A. ~~B.~~ Acute cholecystitis
- B. Cholelithiasis
- C. Hepatocellular carcinoma
- D. Pancreatic malignancy
- E. Cholangiocarcinoma

37. A 60 year old hypertensive and diabetic man who has previously been well is found in the morning with weakness of the right side. He is rushed to the hospital where he arrives in 1 hour. Computerized tomography (CT) scan of the head reveals an infarct. Which of the following would be the MOST effective treatment?

- A. Aspirin
- B. Clopidogrel
- C. Atorvastatin
- D. ~~E.~~ Intravenous tissue plasminogen activator (TPA)
- E. Dipyridamole

38. Which of the following deficiency is found in patients with terminal ileum disease?

- A. Calcium
- B. Iron
- C. ~~D.~~ Folic acid
- D. Trypophan
- E. Cobalamin

39. A 41 year old man admitted for management of heart failure develops a cough, chest pain and fever after 1 week in the hospital. Which one of the following antibiotics is the BEST empiric choice?

- A. Amoxicillin – clavulanic acid
- B. ~~C.~~ Clarithromycin
- C. Cefazidime
- D. Cefuroxime
- E. Flucloxacillin

40. A 43 year old man presents with 8 week history of symmetrical joint pain and swelling involving the metacarpal-phalangeal (MCP) metatarsal – phalangeal (MTP) and proximal interphalangeal (PIP) joints. Symptoms are worse in the morning and last for 1 hour. Which one of the following statements is TRUE of this condition?

- A. ~~B.~~ Non-steroidal anti-inflammatory drugs (NSAIDs) are the first line of therapy
- B. Extra-articular manifestations is not a feature
- C. Radiological investigation is required for the diagnosis
- D. Disease modifying therapy should be instituted immediately
- E. Biologic agents have no role in its management

41. In a 60 year old man with multiple myeloma and a fracture of the right femur, which one of the following is the MOST appropriate approach to management?

- A. ~~B.~~ Start melphalan and radiotherapy
- B. Start melphalan then refer for bone marrow transplantation
- C. Start analgesics, internally fix the fracture then administer radiotherapy
- D. Administer radiotherapy then internally fix the fracture
- E. Start pamidronate then internally fix the fracture

52. Which one of the following is TRUE regarding chronic myeloid leukaemia (CML)?
- A. It is almost exclusively a disease of children
 - B. Leucocyte alkaline phosphatase (LAP) score is reduced
 - C. Lymphadenopathy is common in the stable state
 - D. Autosplenectomy occurs
 - E. Spontaneous fractures tend to occur
53. Which one of the following conditions is associated with dilational hypotonia?
- A. Congestive heart failure
 - B. Acute tubular necrosis
 - C. Gastroenteritis
 - D. Hypothyroidism
 - E. Hypercholesterolaemia
54. A 36 year old man with longstanding bronchial asthma has been on prednisolone 30mg/day for several years. Now he has striking features. The other findings expected in this patient include all of the following EXCEPT:-
- A. Systemic hypertension
 - B. Bone pains
 - C. Normal fibro
 - D. Agitated behaviour
 - E. Raised intra-ocular pressures
55. All of the following are danger signs in status asthmaticus EXCEPT:-
- A. pulse rate of 115 beats/min
 - B. inability to complete sentences
 - C. Respiratory rate of 36 breaths/min
 - D. inability to perform peak flow measurements
 - E. Blood pressure of 90/60 mm Hg
6. All of the following pharmacotherapies have been shown to prolong survival in patients with non-valvular heart failure EXCEPT:-
- A. Spironolactone
 - B. Carvedilol
 - C. Angiotensin converting enzyme inhibitors (ACEI)
 - D. Angiotensin receptor blockers (ARB)
 - E. Loop diuretics
7. A 35 year old man presents with heartburn and a feeling of regurgitation after meals. He frequently clears his throat while talking. Upper gastrointestinal tract (GIT) endoscopy is reported as normal. This condition is associated with all of the following features EXCEPT:-
- A. Poor quality of life
 - B. Increased incidence of malignancy
 - C. Barrett's oesophagus
 - D. Recurrent bronchospasm
 - E. Increased incidence of *Helicobacter pylori*

47. A 20 year old patient presents with pruritic lesions on the neck, antecubital and popliteal fossae since 2 year of age. The lesions are lichenified, excoriated and crusted patches. The MOST likely diagnosis is:-
- A. Atopic dermatitis
 - B. Seborrhoeic dermatitis
 - C. Allergic contact dermatitis
 - D. Nummular dermatitis
 - E. Dyshidrotic dermatitis
48. In a HIV positive patient with cryptococcal meningitis and CD4 count of 40 cells/ μ l, which one of the following approaches would be the MOST appropriate?
- A. Amphotericin B plus fluconazole for 2 weeks, serial lumbar punctures and IIAART initiation at 2 weeks
 - B. IIAART and amphotericin B plus fluconazole simultaneously, serial lumbar punctures
 - C. IIAART for 2 weeks followed by amphotericin B plus fluconazole, serial lumbar punctures.
 - D. Amphotericin B plus fluconazole for 2 weeks, serial lumbar punctures; then fluconazole IIAART initiation after 5 weeks
 - E. IIAART for 5 weeks, serial lumbar punctures. Initiation of amphotericin B plus fluconazole after 5 weeks.
49. A 40 year old alcoholic goes to bed and wakes up in the morning with a wrist drop. The MOST likely nerve injury is?
- A. Radial nerve
 - B. Ulnar nerve
 - C. Musculocutaneous nerve
 - D. Median nerve
 - E. Axillary nerve
50. A 28 year old man presents with pain and swelling of his left leg 3 days after a floor prick. Which one of the following antibiotics is the BEST empiric choice?
- A. Ciprofloxacin
 - B. Clarithromycin
 - C. Metronidazole
 - D. Amoxicillin - clavulanic acid
 - E. Nitrofurantoin
51. All of the following statements are true regarding gout EXCEPT:-
- A. The 1st metatarsal -phalangeal joint is commonly involved
 - B. Renal failure is a known complication
 - C. It can present with extra-articular manifestations
 - D. It is common in pre-menopausal women
 - E. It results from monosomic sodium deposition

63. Steroid therapy is indicated in the following oncological emergencies EXCEPT-
- Superior vena cava obstruction
 - Hypercalcemia
 - Severe neutropenic sepsis
 - Raised intracranial pressure
 - Spinal cord compression
64. A 35 year old man presents with nausea, vomiting and general malaise. He has been hypertensive for 5 years. Laboratory tests show:-
- Urinalysis – protein 3+, RBCs 2+, granular casts
 - Haemoglobin 9.3g/dl, MCV 80fl, WBC 6x10⁹/L, platelets 119x10⁹/L
 - Serum K⁺ 5.4 mmol/L, Na⁺ 128 mmol/L, urea 28mmol/L, creatinine 837umol/L
 - Renal ultrasound – bilateral contracted kidneys Right = 6.2 x 3.8 cm, Left = 6.32 x 3.3 cm
- Which of the following statements is TRUE?
- This is acute kidney injury secondary to volume depletion
 - This is acute glomerulonephritis
 - Renal biopsy should be performed
 - Patient requires hempern dialysis
 - Patient has hypertensive glomerulosclerosis
65. All of the following are rational combinations of oral glucose lowering medications EXCEPT-
- Metformin/Acathosce/linnepiride
 - Metformin/Repaglinide/insulin
 - Metformin/insulin
 - Chlorpropamide/Insulin
 - Metformin/Linagliptin/Insulin
66. A 60 year old male has a 20 pack-year history of cigarette smoking. He presents with a productive cough and shortness of breath especially on cold days and associated chest tightness and wheezing. The MOST likely diagnosis is:-
- Asthma
 - Chronic obstructive pulmonary disease (COPD)
 - Heart failure
 - Anxiety attack
 - Pneumonia
67. An elderly female who is being nursed in hospital for dense hemiplegia from a cerebrovascular accident is suddenly diaphoretic and dyspnoeic. On examination, she is cold, sweaty and tachypnoeic. Her radial pulse is weak and feeble. The electrocardiogram (ECG) is significant only for sinus tachycardia. All of the following investigations are useful in establishing the diagnosis EXCEPT-
- Cardiac topoinin assay
 - D-dimer assay
 - Computerized tomography (CT)-pulmonary angiography
 - Blood sugar analysis
 - Chest radiograph

58. A 15 year old boy presents with insidious onset of pruritic eruption on the interdigital clefts, flexor aspects on the wrists and glitcheal cleft. The lesions comprise of papules, vesicles, pustules and burrows. The MOS likely diagnosis is:-
- Larval migrans
 - Papular urticaria
 - Urticaria pigmentosa
 - Scabies
 - Dermatitis herpetiformis
59. A 34 year old HIV positive man presents with a 3 week history of severe headaches and photophobia. His CD4 count is 36 cells /uL. He further reports that 2 months back, he had similar headaches, was admitted and given 2 weeks of amphotericin B for confirmed "fungal meningitis". He did not go for follow up after discharge. What is the MOST useful test to confirm the diagnosis now?
- Cerebrospinal (CSF) cryptococcal antigen (CrAg) test
 - Serum CrAg test
 - India ink in CSF
 - CSF fungal culture
 - CSF protein level
60. A 30 year old woman presents with a 2 week history of progressive weight loss. She has found it difficult to rise from a sitting position and comb her hair. Examination reveals normal deep tendon reflexes and sensory modalities. All of the following statements are true regarding her illness EXCEPT-
- It responds to steroids
 - It is associated with elevated muscle enzymes
 - It is associated with acetylcholine receptor antibodies
 - It is associated with malignancies
 - Dysphagia occurs
61. A 60 year old man presents with a 1 day history of headache, fever and neck stiffness. Which one of the following organisms is NOT likely to cause this presentation?
- Streptococcus pneumoniae*
 - Group A β -hemolytic *Streptococcus*
 - Haemophilus influenzae*
 - Neisseria meningitidis*
 - Listeria monocytogenes*
62. All of the following indicators are useful in evaluating the success of treatment of rheumatoid arthritis EXCEPT-
- Tender joint count
 - Swollen joint count
 - Markers of inflammation
 - Number of deformed joints
 - Functional status of the patient

73. A middle-aged man is reviewed in the outpatient clinic with complaints of abdominal swelling for several weeks. Physical examination reveals a hemogram extending 10 cm below the costal margin. All of the following are likely causes EXCEPT.
- Chronic myeloid leukemia
 - Miliary tuberculosis
 - Myelofibrosis
 - Visceral leishmaniasis
 - Hyper-reactive malarial splenomegaly (HMS)
74. Which one of the following statements is TRUE concerning urinary tract infections?
- Staphylococcus aureus* is the commonest organism among stalkers
 - P. aeruginosa* infection is associated with calculi
 - Treatment of *Candida* infections predisposes one to bacterial infections
 - Haematogenous route of infection is the commonest origin
 - In men, infections are usually associated with sexual intercourse
75. All of the following are established risk factors for diabetic foot ulcer disease EXCEPT.
- Diabetic cardiomyopathy
 - Chronic kidney disease stage 3 and higher
 - Macular eye disease
 - Peripheral neuropathy
 - Claw-toe deformity
76. Which one of the following is NOT a recognized risk factor for the development of deep venous thrombosis?
- Hormonal contraceptive therapy
 - Protein C deficiency
 - Heart failure
 - Anti-phospholipid syndrome
 - Hypertension
77. Which of the following is NOT a cause of conjunctivitis?
- Hypocalcaemia
 - Hypothyroidism
 - Aluminium containing antacids
 - Cerebrovascular accidents
 - Atorvastatin
78. All of the following are risk factors for haemorrhagic stroke EXCEPT.
- Cocaine use
 - Cigarette smoking
 - Arteriohypertensive angiopathy
 - Atenolol
 - Warfarin use

68. All of the following statements regarding irritable bowel syndrome (IBS) are true EXCEPT.
- Presents with increased loose watery stools
 - Diarrhoea often occurs at night
 - The stool never contains blood
 - Constipation is sometimes the predominant symptom
 - Abdominal pain is often relieved by defecation
69. AIDS-defining mucocutaneous disorders include all of the following EXCEPT.
- Oesophageal candidiasis
 - Kaposi's sarcoma
 - Cutaneous cryptococcosis
 - Herpes simplex* ulcers
 - Pyoderma gangrenosum*
70. A 26 year old woman presents with a 2 week history of change in speech and a tongue that deviates to the right side on protrusion. Which cranial nerve is involved?
- Right glossopharyngeal
 - Left glossopharyngeal
 - Right hypoglossal
 - Left hypoglossal
 - Left vagus
71. A 26 year old woman presents with history of chronic cough. She reports that she was on treatment for tuberculosis which she stopped 3 weeks prior after having taken it for 25 days. Which one of the following is NOT appropriate in the approach to her management?
- Restart anti-tuberculous treatment with rifampicin, isoniazid, pyrazinamide and ethambutol
 - Restart anti-tuberculous treatment with rifampicin, isoniazid, pyrazinamide, ethambutol and streptomycin
 - Send sputum for acid fast bacilli staining
 - Send sputum for geneXpert MTB/RIF
 - Apply directly observed therapy
72. A 13 year old boy presents with a 2 day history of fever, right knee pain and swelling. There were no precipitants to this illness. Which one of the following statements is TRUE regarding this condition?
- Intra-articular steroids are useful in the management
 - Analgesics, oral antibiotics and bedrest is the gold standard in the management
 - Antibiotics should be withheld until results of the gram stain are obtained
 - Intra-articular antibiotics are useful
 - Needle aspiration and drainage of the joint is warranted

34. Which of the following conditions is NOT a recognized cause of cardiogenic syncope?

- A. Pulmonary embolism
- B. Ventricular fibrillation
- C. Postural hypotension
- D. First degree heart block
- E. Third degree heart block

35. A 45 year old man with liver cirrhosis and bleeding tendencies and an otherwise normal blood count comes to you for management. Which of the following is the MOST appropriate therapy?

- A. Tranexamic acid
- B. Platelet infusion
- C. Whole blood transfusion
- D. Transfusion of packed cells
- E. Vitamin K

36. Which of the following drugs is LEAST useful in myoclonic epilepsy?

- A. Ethosuximide
- B. Carbamazepine
- C. Sodium valproate
- D. Clonazepam
- E. Lamotrigine

87-1. All Modifiable risk factors for osteoarthritis include all of the following EXCEPT-

- A. Age
- B. Race
- C. Female gender
- D. Obesity
- E. Prior inflammatory joint disease

88. Which one of the following is NOT a risk factor for hepatocellular carcinoma?

- A. Heavy alcohol consumption
- B. Exposure to aflatoxins
- C. Hepatitis A virus
- D. Hepatitis B virus
- E. Hepatitis C virus

89. Which one of the following statements is TRUE regarding diabetic nephropathy?

- A. Stage 2 is characterized by microalbuminuria
- B. Hyperfiltration is only evident in late stages
- C. The microalbuminuria stage is potentially reversible
- D. Microalbuminuria precedes the glomerular structural changes
- E. Stage 4 patients need to be started on dialysis

79.

A tourist suffered a bout of watery diarrhea which became mucoid and blood stained. He had fever and developed severe joint pains a few weeks later. Rheumatoid factor was negative. All of the following statements are true regarding the disease EXCEPT-

- A. *Shigella flexneri* is the causative organism
- B. There is high circulating bacterial antigen
- C. Culture of *Neisseria gonorrhoeae* will be obtained from joint aspirate
- D. It is associated with HLA B27 genotype
- E. It is associated with serum leucocytosis

30. A 45 year old woman with a diagnosis of rheumatoid arthritis has been on methylprednisolone and prednisolone for 2 years. Which one of the following complications is NOT likely to be due to her chronic steroid use?

- A. Cataract formation
- B. Peptic ulcer disease
- C. Diabetes mellitus
- D. Liver disease
- E. Hypertension

81. A strict vegetarian presents with general malaise, exertional dyspnoea and pallor. Peripheral blood film shows segmented neutrophils and the mean corpuscular volume (MCV) is 110fl. Which one of the following statements is TRUE?

- A. Gum hypertrophy occurs
- B. Serum ferritin levels are low
- C. Bone marrow Prussian blue stain is negative
- D. Parosmia is common
- E. Condition is invariably fatal

82. A 30 year old man has just been diagnosed with HIV. He presents to the clinic with complaints of unintentional weight loss despite a good appetite. His initial weight was 70Kg. He has lost 8 Kg over the past 3 months. Physical exam reveals generalized lymphadenopathy. What is his current WHO stage?

- A. Stage 0
 - B. Stage 1
 - C. Stage 2
 - D. Stage 3
 - E. Stage 4
- $\frac{8}{70} \times 100 = 11\% > 10\% = 3 \text{ stage}$

83. A 28 year old woman presents with goitre. Thyroid profile showed TSH = 0.000m IU/L, FT4 = 30ng/L, FT3 = 12 pmol/L. Ultrasound showed a thyroid nodule in the right lobe, the rest had normal echodensity. Which of the following treatments is LEAST appropriate for her?

- A. Propylthiouracil
- B. Lugol's iodine
- C. Methylprednisolone
- D. Surgery
- E. Propylthiouracil

- is followed by a severe episode of generalized tonic-clonic seizure. Before the onset of the seizure, she had reported a funny smell. Examination reveals a temperature of 38°C, confusional state with no evidence of meningeal irritation. Which of the following would be the MOST effective treatment in this condition?
- Acyclovir
 - Ganciclovir
 - Anti-tuberculous treatment
 - High dose steroids
 - Ceftriaxone with vancomycin
97. Low voltages on a 12-lead ECG occur in all the following conditions EXCEPT.
- Amyloid heart
 - Chronic obstructive pulmonary disease (COPD)
 - Pericarditis
 - Obesity
 - Pericardial effusion
98. A 22 year old man presents with a 6-month history of left upper quadrant discomfort and early satiety. 2 days prior to presentation, he developed pleuritic abdominal pain revealed splenomegaly 12 cm below left costal margin. White blood cell count (WBC) is $279 \times 10^9/L$, haemoglobin is $9.4 g/dL$ and platelets $702 \times 10^9/L$. What is the MOST appropriate next investigation to confirm the diagnosis?
- Abdominal ultrasound scan
 - Erythropoietin level
 - Haemoglobin electrophoresis
 - Bone marrow evaluation
 - Peripheral blood film
99. Which one of the following statements is TRUE regarding ascites in liver disease?
- Thiazides are the diuretics of choice
 - Malignant ascites responds well to diuretic therapy
 - Portal hypertension is a rare cause
 - Aldosterone antagonists are the preferred diuretics
 - Infectious aetiology is uncommon
100. A 20 year old woman at 20 weeks gestation presents to the emergency department with dyspnoea class III. On examination, she has a regular pulse rate of 90 beats/min, a non-displaced apex with apical mid-diastolic rumbling murmur with loud first heart sound. Which of the following is the MOST appropriate emergency therapeutic intervention?
- Furosemide therapy
 - Termination of pregnancy
 - Digoxin therapy
 - Angiotensin converting enzyme inhibitor (ACEI) therapy
 - Beta blocker therapy

90. All of the following are evidence - based therapeutic lifestyle changes in the control of systemic arterial hypertension EXCEPT.
- Moderation of alcohol ingestion
 - Reduced dietary salt ingestion
 - Lower dietary potassium intake
 - Stress management
 - Regular aerobic exercise
91. A 30 year old pregnant woman is found to be hepatitis B surface antigen (HBs Ag) positive. She is concerned about transmitting the virus to her unborn infant. Which of the following factors is MOST useful in determining the risk of transmission?
- Hepatitis B e antigen (HBeAg) status
 - Hepatitis B core immunoglobulin G (HBcIgG) status
 - Alanine aminotransferase (ALT) 231u/L
 - Her alcohol history
 - Aspartate aminotransferase (AST)/ALT ratio >2
92. A 38 year old woman presents with a 1 month history of bilateral numbness of the lower limbs. Examination is notable for reduced vibration sense and reduced ankle reflexes. All of the following tests are useful in this patient EXCEPT.
- Serum sodium
 - Serum creatinine
 - Thyroid stimulating hormone
 - Cytosolic haemoglobin
 - Haemoglobin level
93. A 25 year old woman presents with gradual skin tightening involving the hands and feet. She also has first degree heart block on the ECG and reflux oesophagitis. Which one of the following statements is TRUE regarding this condition?
- It is commoner in males compared to females
 - It is easily amenable to treatment
 - Resnaud's phenomenon is an invariable feature
 - It has no renal manifestations
 - It is usually an indolent disease
94. A 16 year old girl has bilateral haemarthrosis of elbow joints. She has a fluctuant right knee that is tender. She is bleed from a venopuncture site for the past 24 hours. Which one of the following is the MOST likely diagnosis?
- Classical hemophilia
 - Christmas disease
 - Von Willebrand's disease
 - Disseminated intravascular coagulation (DIC)
 - Protein C deficiency
95. All of the following are features of minimal change glomerulonephritis EXCEPT.
- Heavy proteinuria
 - Hypertension
 - Corticosteroid responsiveness
 - Lack of active sediment in urine
 - Hypercholesterolemia

Mx0
G20

1^o Syphilis
- painless
- 2-6 w
2^o Syphilis
Candyta
3^o - gumma
4^o - Anem

The following are matched correctly except:

- (a) Painless chancre ✓
- (b) Painful chancre ✓
- (c) Grouped vesicles ✓
- (d) Inguinal lymphadenopathy ✓
- (e) Rectal discharge ✓

A 20 yr old previously healthy man presents with a 2 day history of chest pain appropriate for his treatment? Which one of the following is least appropriate for his treatment?

- (a) Amoxicillin/clavulanic acid ✓
- (b) Doxycycline ✓
- (c) Azithromycin ✓
- (d) Ciprofloxacin ✓
- (e) Cefuroxime ✓

A 54 year old man with diabetes mellitus presents with swelling and pain of his right foot. On examination the foot is found to be swollen, warm, tender with Achilles foot. Which one of the following is most appropriate for his treatment?

- (a) Cloxacillin ✓
- (b) Ciprofloxacin ✓
- (c) Amoxicillin/clavulanic acid ✓
- (d) Benzyl penicillin ✓
- (e) Clindamycin ✓

An 18 year old female known to have rheumatic heart disease presents with chest pain and worsening heart failure. On examination she is found to have a new mitral regurgitation murmur and mild splenomegaly. Which one of the following is an appropriate empiric choice of treatment for her?

- (a) Crystalline penicillin only ✓
- (b) Ampicillin and levofloxacin ✓
- (c) Ampicillin and gentamicin ✓
- (d) Ceftriaxone only ✓
- (e) Ampicillin, gentamicin and vancomycin ✓

A 40 year old female currently on treatment with a course of antibiotic for develops profuse diarrhea. Which one of the following is an appropriate choice of antibiotic for her treatment?

- (a) Oral ciprofloxacin ✓
- (b) Oral Metronidazole ✓
- (c) Oral sulfamethoxazole trimethoprim ✓
- (d) Continue oral diphenhydramine ✓
- (e) Oral amoxicillin ✓

Which one of the following is not essential in the diagnosis of severe asthma?

- (a) Blood pressure < 90/60 mmHg ✓
- (b) Creatinine > 130 mmol/L ✓
- (c) Severe dehydration ✓
- (d) INR greater than normal ✓
- (e) Confusion or delirium ✓

A 36 year old HIV positive female with a CD4 of 50 cells/L presents with a 2 month history of severe headache and a positive CSF CRAG. All of the following are indicated in her treatment except:

- (a) Amphotericin B and Fluconazole ✓
- (b) Amphotericin B and Deamethasone ✓
- (c) High dose Fluconazole ✓
- (d) High dose Fluconazole and Fluycosinate ✓

A patient presents to the Accident and Emergency department with diplopia. Which of the following is inconsistent with a diagnosis of right 3rd cranial nerve palsy?

- (a) Inability to fully adduct the right eye ✓
- (b) Dilated right pupil ✓
- (c) Inability to fully abduct the right eye ✓
- (d) Right ptosis ✓
- (e) Right eye resting in down and out position ✓

Following an infective episode, all the following medications are indicated alone or in combination, except:

- (a) Aspirin ✓
- (b) Clopidogrel ✓
- (c) Atorvastatin ✓
- (d) Warfarin ✓
- (e) Nimodipine ✓

SAH

10. In a patient with facial muscle weakness suggest a diagnosis other than Bell's palsy?

- (a) Sparg of botulism myasthenia gravis ✓
- (b) Altered taste sensation ✓
- (c) History of preceding respiratory infection ✓
- (d) Unilateral involvement ✓
- (e) Altered hearing on affected side ✓

11. Regarding lumbar punctures, which is TRUE?

- (a) In viral meningitis, the CSF glucose is always normal ✓
- (b) In tuberculous meningitis, the CSF protein is usually high ✓
- (c) In bacterial meningitis, the CSF protein is usually normal ✓
- (d) In sub-arachnoid hemorrhage, the CSF colour does not change ✓

12. All the following are features of pellagra EXCEPT:

- (a) Dermatitis ✓
- (b) Megalocytosis ✓
- (c) Depression ✓
- (d) Hyperpigmentation ✓

13. Which of the following is matched correctly in relation to deficiency and the resulting disorder?

- (a) Iron deficiency - Brittle bones ✓
- (b) Iodine deficiency - Goiter ✓
- (c) Fluoride deficiency - Cystophagia ✓
- (d) Zinc deficiency - Reduced immunity ✓
- (e) Calcium deficiency - Osteoporosis ✓

14. Indications for targeted viral load testing according to the Kenya National ART guidelines include all of the following EXCEPT:

- (a) CD4 counts lower than 100 after 12 months on ART ✓
- (b) Fall of CD4 count to or below pre-ART level ✓
- (c) Fall of CD4 count by 30% or more from on-treatment peak value ✓
- (d) Pruritic papular eruptions after 6 months on ART ✓
- (e) Recurrent WHO Stage 2 illness after 6 months on ART ✓

15. John, 55 years, has just been diagnosed with HIV. He presented to the clinic with complaints of generalized weakness, loss of appetite, 10kg weight loss over the past 3 months and has lost 2kg over the past few months. Physical examination reveals generalized lymphadenopathy and an old right parietal stroke. What is the current WHO stage?

- (a) Stage 0
- (b) Stage 1
- (c) Stage 2
- (d) Stage 3
- (e) Stage 4

16. Josephine presents with 4 weeks history of headache and 2kg weight loss over the past 3 months ago. Significant medical history includes a diagnosis of HIV infection 2 months ago with 2 baseline CD4 count of 150 cells/uL. She has not yet commenced ART. Examination reveals bilateral parietal masses. The most likely diagnosis is:

- (a) Bacterial meningitis ✓
- (b) Cryptococcal meningitis ✓
- (c) Progressive multifocal leukoencephalopathy (PML) ✓
- (d) Primary brain lymphoma ✓
- (e) Toxoplasmosis ✓

17. A 45 year old man presents with chronic watery discharge and weight loss. Factors that would lead to a diagnosis of Crohn's disease include all the following EXCEPT:

- (a) A vague mass in the right iliac fossa ✓
- (b) Skip ulcerated lesion of the gut mucosa ✓
- (c) Fistulae of the gut ✓
- (d) Anorectal fissure ✓
- (e) Associated blood stained stools ✓

18. Factors that would lead to a diagnosis of Crohn's disease include all the following EXCEPT:

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- (b) Skip ulcerated lesion of the gut mucosa ✓
- (c) Fistulae of the gut ✓
- (d) Anorectal fissure ✓
- (e) Associated blood stained stools ✓

119 A 35 year old known alcoholic presents with sudden onset of abdominal pain mainly in the epigastrium. Clinical examination reveals no rebound tenderness and the serum amylase is 600 IU/L. Which of the following is not indicated in the immediate management of this man?

- (a) Intravenous fluids
- (b) Antibiotics
- (c) Proton pump inhibitor
- (d) Oral feeding
- (e) Abdominal CT scan evaluation

A 30 year old obese man presents with burning retrosternal chest pain associated with hoarseness of voice. Both the electrocardiogram and serum troponin levels are normal. Upper GI endoscopy is also normal. Which of the following is not indicated in the management of this condition?

- (a) 24 hour pH monitoring
- (b) Esomeprazole
- (c) Weight reduction
- (d) Cardiac beta-blocker
- (e) Oesophageal manometry

21 A patient presents with haematemesis which is later confirmed at endoscopy to be originating from bleeding oesophageal varices. Which of the treatments below is not indicated in his immediate management?

- (a) Normal saline infusion
- (b) Band ligation
- (c) Sandostatin infusion
- (d) Propranolol
- (e) Porto caval shunting

22 The following are recommended in the management of acute liver failure except:

- (a) Mannitol
- (b) Dextrose
- (c) Vitamin K
- (d) Diazepam
- (e) Fresh frozen plasma

23 The following Hepatitis B serologic profile is found in an asymptomatic 40 year old male:

- HBsAg Positive
- anti-HBc Positive
- anti-HBe Positive
- anti-HBc IgM Positive
- anti-HBc IgG Positive
- anti-HBc Total Positive
- anti-HBc IgA Negative
- anti-HBc IgE Negative
- anti-HBc IgM Negative
- anti-HBc IgG Negative
- anti-HBc Total Negative
- anti-HBc IgA Negative
- anti-HBc IgE Negative

Which of the following is the best interpretation of this profile?

- (a) Past Hepatitis B infection
- (b) Acute Hepatitis B infection
- (c) Inactive HBV carrier
- (d) Chronic Hepatitis B infection
- (e) Hepatitis B vaccination

24 A 43 year old with a 10 year history of ulcerative colitis presents for annual follow up health examination. Which of the following test is least useful?

- (a) Serum Alkaline phosphatase (ALP)
- (b) Colonoscopy
- (c) Complete blood count
- (d) OGD
- (e) Serum Gamma glutamyl transferase (GGT) and Alanine transaminase (ALT)

25 Which of the following statements regarding Helicobacter pylori is true?

- (a) It is associated with a small proportion of duodenal ulcers
- (b) It invades gastric mucus and rarely causes systemic infections
- (c) It colonizes surface epithelial cells in the antrum of the stomach
- (d) It causes a decrease in antral G-cells
- (e) It increases the risk of GERD

26 Six months after a diagnosis of GERD, a patient presents with intermittent difficulty in swallowing solid food without odynophagia, weight loss or vomiting. Which one of the following is the most likely cause of the dysphagia?

- (a) Achalasia
- (b) Esophageal stricture
- (c) Esophageal cancer
- (d) Barrett's esophagus
- (e) Hiatus Hernia

0703107061 → BSAP ASK

... factors are known to cause focal segmental glomerulosclerosis decrease FSGS

- (a) Interferon Beta use
 - (b) Hepatitis C virus infection
 - (c) Lymphoma
 - (d) Massive obesity
- HPV, peritonitis
HP B

- Factors in the pathogenesis of Malaise Associated Acute Kidney Injury include the following except:
- (a) Haemolysis
 - (b) Disseminated intravascular coagulation
 - (c) Rhabdomyolysis
 - (d) Macroangiopathic Hemolytic Anemia
 - (e) Shock
- leads to the release of myoglobin
which leads to the release of myoglobin
which leads to the release of myoglobin

- Factors that mitigate against the probability of minimal change Nephrotic Syndrome include all below except:
- (a) Diabetic patient in the family of the patient
 - (b) Global renal dysfunction
 - (c) Elderly patient
 - (d) Urine concentration defects
 - (e) Schistocyte proteinuria

- The following are adverse effects of blood transfusion except:
- (a) Iron overload
 - (b) Polycythemia Vera
 - (c) Transmission of Hepatitis C virus infection
 - (d) Transfusion induced lymphocyte suppression
 - (e) Allensensitization

Which one of the following statements is true concerning the stages of diabetic nephropathy?

- (1) Glomerular Basement Membrane (GBM) thickening occurs in stage I
 - (2) Stage 2 is characterized by microalbuminuria
 - (3) Stage 3 is quiescent
 - (4) Stage 4 disease has reduced glomerular filtration rate (GFR)
 - (5) Macroproteinuria is present in Stage 3
- Stage I → RFP, GFR ↓, Kidney size ↓
Stage II → RFP, GFR ↓, Kidney size ↓
Stage III → RFP, GFR ↓, Kidney size ↓
Stage IV → RFP, GFR ↓, Kidney size ↓
- BP ↓, GFR ↓, Proteinuria ↓
BP ↑, GFR ↓, Proteinuria ↑
- Page 7 of 22

Which one of the following statements is false concerning urinary tract infections?

- (a) Female are more prone to UTI
- (b) E. coli is the commonest organism isolated
- (c) Escherichia coli is a commoner cause of cystitis
- (d) Isolation of Proteus species may indicate presence of renal calculus
- (e) Infections in males are more commonly associated with urinary tract structural abnormalities than in women

A 65 year old man with angina, severe peripheral and leg lesions on skull X-rays is found to have a serum creatinine of 300 micromol/L. All the following are possible causes of renal failure in him except:

- (a) Bladder outlet obstruction
- (b) Hypertensive chronic
- (c) Paracetamol ingestion
- (d) Hypernatremia
- (e) Sepsis

Which of the following statements is true concerning pre-eclampsia?

- (a) The intra-ocular volume is usually decreased
- (b) Hypertension should be initially managed with beta-agonistic blood pressure
- (c) Proteinuria usually persists for longer than 6 months post delivery
- (d) Termination of pregnancy is mandatory
- (e) Hypertension is commonly associated with proteinuria

A patient with HIV/AIDS and CD4 count of 10/cmm presents with multiple painful pustular lesions on legs and arms which subsequently break down to form undermined ulcers with necrotic base. The most likely diagnosis is:

- (a) Bullous impetigo
- (b) Kaposi's sarcoma
- (c) Pyoderma gangrenosum
- (d) Fungus
- (e) Cellulitis

A 25 year old patient presents with scaly papules and plaques. Differential diagnoses include all the following except:

- (a) Psoriasis vulgaris
- (b) Tinea glabris
- (c) Nummular dermatitis
- (d) Pityriasis rosea
- (e) Urticaria

- Stage I - Renal flow ↓, GFR ↓
Stage II - Renal flow ↓, GFR ↓
Stage III - Renal flow ↓, GFR ↓
Stage IV - Renal flow ↓, GFR ↓
- BP ↓, GFR ↓, Proteinuria ↓
BP ↑, GFR ↓, Proteinuria ↑
- Page 8 of 22

37 Cutaneous lesions of lumps erythematous include all the following, EXCEPT -

- (a) Malar erythema ✓
 - (b) Psoriasis ✓
 - (c) Discoid ✓
 - (d) Vasculitis ✓
 - (e) Nodular prurigo - like ✓
- oral ulcers, photosensitivity, non-invasive actinic, purpura etc.*

38 A patient presents with generalized pruritic wheals. The face is diffusely swollen. The patient is cyanosed with laboured breathing. The priority intervention is:

- (a) Intravenous line ✓
- (b) Secure airway ✓
- (c) Nebulization ✓
- (d) Oxygen by mask ✓
- (e) Central venous pressure line ✓

39 A 22 year old, previously healthy, patient presents with serous fluid filled vesicles and bullae of three days duration. Nikolsky sign is positive. Tension lesion on the face is 30%. Other prognostic factors include all the following EXCEPT?

- (a) Pulse rate ✓
 - (b) Serum urea ✓
 - (c) Haemoglobin ✓
 - (d) Blood glucose ✓
 - (e) Serum bicarbonate ✓
- purpura, vulgata, scalded skin syndrome, TEN*

40 All the following are associated with photosensitivity EXCEPT:

- (a) Dermatomyositis ✓
- (b) Pellagra ✓
- (c) Lupus erythematosus ✓
- (d) Porphyria cutanea tarda ✓
- (e) Enalapril induced cutaneous eruption ✓

41 A 15 year old student presents with lichenified patches on the neck, antecubital and popliteal fossae. He has had remissions with topical steroids followed by relapses since early childhood. What is the most likely diagnosis?

- (a) Allergic contact dermatitis ✓
 - (b) Irritant contact dermatitis ✓
 - (c) Seborrhoeic dermatitis ✓
 - (d) Atopic dermatitis ✓
 - (e) Nummular dermatitis ✓
- relapsing*

42 Physical modalities used in the rehabilitation of patients with arthritis include the following EXCEPT:

- (a) Electrical stimulation ✓
- (b) Hydrotherapy ✓
- (c) Exercise therapy ✓
- (d) Rest prescription ✓
- (e) Cognitive behaviour therapy ✓

43 The following are true concerning septic arthritis EXCEPT:

- (a) Pre-existing rheumatoid arthritis is a risk factor ✓
- (b) Staphylococcus aureus is the most common organism in prosthetic joint infections ✓
- (c) Atrophic treatment should begin immediately once proper samples for microbiologic studies have been collected ✓
- (d) Hemodialysis patients are predisposed to infections at extra-skeletal sites ✓

44 The following medications are used in the treatment of acute attacks of gout EXCEPT:

- (a) Non steroidal anti-inflammatory drugs (NSAIDs) ✓
 - (b) Corticosteroids ✓
 - (c) Colchicine ✓
 - (d) Allopurinol ✓
 - (e) Adrenocorticotropic hormone (ACTH) ✓
- For prophylaxis*

45 The following are true concerning gout EXCEPT:

- (a) The age of onset in women is older ✓
- (b) The majority of people with hyperuricaemia never develop symptoms ✓
- (c) The development of tophiaceous deposits of monosodium urate is a function of the duration and severity of hyperuricaemia ✓
- (d) Symptoms are ameliorated by probenecid ✓
- (e) It is commonly associated with abnormalities of serum lipids ✓

46 The following are true of spondyloarthritis EXCEPT:

- (a) The eye is involved ✓
 - (b) Sacroiliitis occurs ✓
 - (c) Anti-CCP antibodies test is invariably positive ✓
 - (d) HLA-B27 is a strong genetic risk factor ✓
 - (e) Etanercept is useful in treatment ✓
- RA*

The following are true concerning fibromyalgia - correct

- (A) Exercise is a cardinal element of the etiology ✓
- (B) Symptoms are exacerbated by lifestyle antidepressants ✓
- (C) Fatigue is worsened by physical activity ✓
- (D) Commonly presents with initial bowel syndrome ✓
- (E) Deficits of attention and memory occur ✓

Non-inflammatory causes of epigastriitis include all the following except:

- (A) Osteoarthritis ✓
- (B) Esophagitis ✓
- (C) Osteoarthritis ✓
- (D) Reactive arthritis ✓
- (E) Igammunoglobulin synovitis ✓

An elderly female patient who is being nursed in hospital following total hip replacement surgery is suddenly reported to be diaphoretic and dyspnoeic. On physical examination she is cold, sweaty and tachypnoeic with feeble pulses and is desaturating with SpO_2 75%. The ECG is significant only for sinus tachycardia of 120 bpm. Which of the following investigations has the highest positive predictive diagnostic value.

- (A) Cardiac troponin
- (B) D-Dimer
- (C) Computer Tomography (CT) - Pulmonary angiography ✓
- (D) Mixed gas analysis
- (E) Echocardiography

As part of a pre operative evaluation, a 75 year old man is incidentally found to have an isolated irregularly irregular pulse at rate 80 bpm, and a 12 lead ECG shows absence of P waves. All the following therapies are potentially indicated except:

- (A) Digoxin ✓
- (B) Warfarin ✓
- (C) Beta cardio version ✓
- (D) Amiodarone ✓
- (E) Propafenone ✓

CCF 1
HTN 1
Age 75 2
DM 1

CHAD score < 2
50 use Aspirin
72 Warfarin
Page 11 of 22
Aspirin

51. All of the following are recognized causes of electrocardiographic ST segment deviation except:

- (A) Early ventricular repolarisation ✓
- (B) Pulmonary embolism ✓
- (C) Pericarditis ✓
- (D) Myocardial ischaemia ✓
- (E) Ventricular aneurysm formation post MI ✓

52. A 65 year old healthy elderly patient is involved in a fall from a chair and is transported to the hospital with a knife in his left midclavicular line. He is taken to the emergency department and on arrival his blood pressure is barely palpable. His lungs are clear to auscultation. His heart sounds are barely audible. Which of the following is the most likely diagnosis:

- (A) Myocardial contusion
- (B) Aortic laceration
- (C) Tercantal tamponade ✓
- (D) Haemopericardium ✓
- (E) Aortic MI

53. A 50 year old patient with diabetes presents to A & E department at 3 am with a four hour history of on-going severe constricting chest pain. Examination reveals BP 100/60 mm Hg and pulse 110 bpm. ECG reveals inferior ST segment elevation. All the following are appropriate therapies in the urgent management except:

- (A) Thrombolysis ✓
- (B) Warfarin used for long term secondary prevention ✓
- (C) Percutaneous coronary revascularisation ✓
- (D) Beta-adrenergic blocker ✓
- (E) Clopidogrel ✓

54. A 16 year old patient from rural Kenya has a white blood cell count of 9×10^9 /litre and 60% neutrophils. The haemoglobin is 6.7 g/dl, MCV of 59 fl and platelets of 45×10^9 /litre. The spleen is enlarged. Which one of the following is the most likely association?

- (A) Presence of Schistosoma haematobium ova in stools ✓
- (B) Presence of Schistosoma mansoni ova in stools ✓
- (C) Presence of Ascaris lumbricoides ova in stools ✓
- (D) Presence of Necator americanus ova in stools ✓
- (E) Presence of Taenia saginata ova in stools ✓

A 15 year old boy patient from Western Kenya had dental extraction of six lower teeth and bleeding continued for over 48 hours, requiring admission in hospital. Which of the following statements is of least importance?

- (a) Presence of global alopecia
- (b) History of jaundice weeks prior to the episode
- (c) Presence of excessive bleeding from pale relative following minor trauma
- (d) Presence of gingival hyperplasia
- (e) History of menorrhagia in a maternal aunt

A 23 year old patient has haemoglobin of 5.3g/dl, platelet count of 33x10⁹/litre, total white blood cell count of 6.8 x 10⁹/litre. There are bilateral cervical nodes measuring 1x2 cm and a tipped spleen. Which one of the following diagnosis is most likely?

- (a) Hypersplenism
- (b) Aplastic anaemia
- (c) Acute myeloid leukaemia
- (d) Myelodysplastic syndrome
- (e) Pernicious anaemia

A 75 year old adenomatous man is pale with a haemoglobin of 4.5g/dl, MCV of 156 fl, total white blood cell count of 1.5 x 10⁹/litre and platelets of 87 x 10⁹/litre. Which one of the following can prevent the recurrence of this condition?

- (a) Avoidance of Chloramphenicol
- (b) Eating of well-cooked legumes
- (c) Eating of roasted meat and great products
- (d) Eating of half cooked vegetables
- (e) Eating of raw fish from the Far East

A 43 year old patient has a diagnosis of multiple myeloma. The haemoglobin is 11g/dl, white cell count is 6.7 x 10⁹/litre and platelets are 131 x 10⁹/litre. There are no other significant co-morbidities. Which are of the following drugs should be avoided as much in the treatment of this condition?

- (a) Vincristine
- (b) Borzomib
- (c) Melphalan
- (d) Thalidomide
- (e) Doxorubicin

A 23 year old female underwent abortion of a 14 week foetus last week. She is mildly pale and sick-looking. The temperature is 39.7°C, pulse 112/minute, regular. The haemoglobin is 8g/dl, total white blood cell count 17x10⁹/litre, platelets are 13x10⁹/litre. Which one of the following statements is correct?

- (a) There is underlying acute leukaemia
- (b) The number of bone marrow megakaryocytes is suppressed
- (c) There are features of immune thrombocytopenic purpura
- (d) There is a picture of haemolytic uraemic syndrome
- (e) There is disseminated intravascular coagulation

A 16 year old patient has had repeated blood transfusions since the age of 14. There is mild jaundice, moderate to mild pallor and tender right hypochondrium. The limbs are thin and some digits of the hands and legs are atrophied. What is the most likely cause of the right hypochondric tenderness?

- (a) Hepato-splenic carcinoma
- (b) Cholangitis
- (c) Regeneration of red blood cells in the liver
- (d) Amoebic liver abscess
- (e) Typhoid

A 64 year old has left cervical and bilateral axillary lymphadenopathy of 2.2 cm. The haemoglobin is 12g/dl, white blood cell count is 5.6x10⁹/litre with 6.9% neutrophils, platelets are 480 x 10⁹/litre. Histology and immunohistochemistry have confirmed follicular lymphoma grade 1. Which of the following statements is incorrect?

- (a) This is indolent disease
- (b) CD 20 is likely to be strongly positive
- (c) Chemotherapy should be deferred
- (d) There is a close to 30% chance of transformation to higher grade disease
- (e) This disease is highly curable

Which one of the following is not a post-mortem change?

- (a) Adipocere
- (b) Sclerotization
- (c) Putrefaction
- (d) Skin slippage
- (e) Bulge of the meninges

Which of the following are not correctly matched as pathological parasite - vector?

- (1) S. Entomophora - Blomphylaxa species ✓
- (2) P. falciparum - female Anopheles mosquito ✓
- (3) Lyme disease - Ixodes ricinus tick ✓
- (4) T. brucei - tsetse fly ✓
- (5) Leishmania - sand fly ✓

A 2 months pregnant woman, who normally resides in Nairobi is on holiday at Mombasa. She has not taken any malaria prophylactic medication. She develops rigors and fevers temperature 39°C on the 4th day of her visit. Which is the most likely diagnosis?

- (a) Malaria - malarial parasite ✓
- (b) Typhoid - *Salmonella typhi* ✓
- (c) Pelvic inflammatory disease ✓
- (d) Urinary tract infection - *Escherichia coli* ✓
- (e) Brucellosis - *Brucella abortus* ✓

A British tourist went boating and swimming in Lake Victoria. A week after he develops fever, anaemia and lymphadenopathy. All the following statements are true except:

- (a) The condition is related to his contact with lake water ✓
- (b) High eosinophilic count is expected ✓
- (c) Tenosynovitis myositis is a known complication ✓
- (d) Heaviness of the body is a related finding ✓
- (e) Jelly fish sting is the most likely cause of his illness ✓

Binocular ptosis is a feature of:

- (a) 7th cranial nerve palsy ✓
- (b) Polymyositis ✓
- (c) Trochlear palsy ✓
- (d) Myasthenia gravis ✓
- (e) Abducens palsy ✓

All the following are correctly matched except:

- (a) Ataxic myasthenius - Multiple sclerosis ✓
- (b) Pseudotumor cerebri - Retinitis pigmentosa ✓
- (c) Oculogyric crisis - Uraemic neuropathy ✓
- (d) Postural hypotension - Shy Drager syndrome ✓
- (e) Gastric swelling - Diabetic neuropathy ✓

All the following are correct concerning X-linked dominant disorders except:

- (a) Vitamin D-resistant rickets is an example ✓
- (b) All female offspring of an affected male will have the disease ✓
- (c) Females do not manifest the milder forms of the disease ✓
- (d) Half the males or female offspring of an affected mother have the disease ✓
- (e) No male offspring of an affected man will have the disorder if their mother not affected ✓

A 49 year old male painter is diagnosed with diabetes mellitus. He has noticed hand and foot changes requiring change of size of working gloves from medium to large in the last 2 years. His shoe size has changed from size 7 to 8. Which of the following statements is true concerning him?

- (a) His libido is expected to increase ✓
- (b) Muscular hypertrophy is usually associated ✓
- (c) This is a recognized side effect of sulphonylurea class of drugs ✓
- (d) Visual deterioration and visual field defects occur ✓
- (e) Loss of facial and axillary hair is expected ✓

Adrenocorticogenesis is positively regulated (stimulated) by the following factors except:

- (a) Renin-angiotensin system ✓
- (b) Prolactin ✓
- (c) Serotonin ✓
- (d) Dopamine ✓
- (e) Prolactin and prolactin releasing hormone ✓

The following are true of the syndrome of idiopathic acromegaly (SIAD) except:

- (a) Hypocalcaemia is a classic finding ✓
- (b) Neoplasia is causally linked ✓
- (c) Acute intermittent porphyria is a nonmetabolic cause ✓
- (d) SIAD is a diagnosis of exclusion ✓
- (e) Demopressin is an isotonic cause ✓

Which of the following conditions is associated with metabolic acidosis with wide anion gap? (Low fasting K^+ , lactates) not metabolic acidosis

- (a) Pyloric stenosis ✓
- (b) Renal tubular acidosis type 1 ✓
- (c) Uretero sigmoidostomy ✓
- (d) Acetazolamide toxicity ✓
- (e) Diabetic ketoacidosis ✓

1 week before - 10 ↓ C₅₀

A 13 year old boy is evaluated for stunted growth. He has a previous history of limb fractures associated with minimal trauma. Arterial blood assay show pH 7.29, p_{H2O} = 7.34 - 7.44. Early morning urine pH 7.52 which one of the following is an expected finding?

- (a) Hypertiglycaemia
- (b) Hypokalaemia ✓
- (c) Nephrocalcinosis ✓
- (d) Renal artery stenosis
- (e) Proteinuria

Modalities of therapy in actively bleeding esophageal varices include all the following except:

- (a) Octreotide infusion ✓
- (b) Band ligation ✓
- (c) Propanolol infusion ✓
- (d) Vasopressin administration ✓
- (e) Sclerotherapy ✓

A 56 year old woman presents with polyuria, polydipsia and progressive weakness. She had been discharged from hospital two weeks prior, where she had been managed for a concussion injury. Random blood sugar is 4.2 mmol/L. Urinalysis shows low osmolality. Which of the following statements is true?

- (a) Hypoparathyroidism is a feature ✓
- (b) Marked diabetes mellitus is a likely diagnosis ✓
- (c) Hypocalcaemia is expected ✓
- (d) Hypokalaemia is an expected cause of this presentation ✓
- (e) Hypertonic saline improves the situation if hyponatremia occurs ✓

97 The metabolic syndrome is defined by the presence of the following except:

- (a) Abdominal obesity ✓
- (b) Hypertension ✓
- (c) High HDL-cholesterol ✓
- (d) Fasting triglyceridemia ✓
- (e) Improved glucose tolerance ✓

98 Which one of the following is not true of Wuchereria bancrofti?

- (a) Transmitted by the Culex mosquito ✓
- (b) Associated with nocturnal periodicity ✓
- (c) Associated with pulmonary eosinophilia ✓
- (d) Prevented by treating the whole population with diethylcarbamazine ✓
- (e) There are no serologic tests for its diagnosis ✓

A 20 year old male presents with a 3 week history of fever and conjunctivitis. On examination he is found to be febrile at 38°C and to have splenomegaly of 3cm below the costal margin. Which one of the following is not an appropriate investigation?

- (a) Blood culture ✓
- (b) Urine culture ✓
- (c) ~~Widal test~~
- (d) Demonstration of rising antibody titres ✓
- (e) Stool culture ✓

100 A young girl from North-Essex province presents with sudden onset of fever associated with right upper quadrant pain that increases on deep breathing. She has a trace of jaundice and a raised white cell count. Which statement is false regarding this condition?

- (a) Imaging of the abdomen is indicated ✓
- (b) A calculus (stone) in the gall bladder is common ✓
- (c) Antibiotics are useful in the management ✓
- (d) Surgery is of proven benefit ✓
- (e) Courvoisier's sign is invariably positive ✓

Conjunctivitis's sign
if there is a palpable gallbladder
is in conjunction with pinkness
suggest a course more than gall

1-cm 9-11-1
10-cm 11-11-1
10-cm 11-11-1

Muthamwa

Mwata

IMED



UNIVERSITY OF NAIROBI

UNIVERSITY EXAMINATIONS 2013/2014

FIFTH YEAR EXAMINATIONS FOR THE DEGREE OF BACHELOR OF
MEDICINE AND BACHELOR OF SURGERY

HME500: MEDICINE-MCO

DATE: NOVEMBER 6, 2014

TIME: 9.00 A.M. – 12.00 NOON

Mohini

INSTRUCTIONS:

1. There are 100 Multiple Choice (MCOs) Questions in this paper. Ensure that your paper has all the questions.
2. Each question has ONE BEST ANSWER.
3. There is no negative marking for incorrect responses.
4. No mark will be given if more than one answer is marked in a single question.
5. An answer sheet is provided where all your answers should be appropriately marked as per instructions.
6. The examination paper should be left in the examination room.

1. A 20 year old woman presents with sudden onset weakness of the right side of the body with normal speech. The MOST likely site of the lesion is?

- A. Internal capsule
- B. Middle cerebral artery territory \rightarrow lower limb extensors.
- ~~C. Brain stem - hemiparesis + CN palsy.~~
- D. Pons
- E. Cerebellar peduncle

2. Which one of the following statements is TRUE regarding characteristics of X-linked recessive disorders?

- A. In the male, X-linked recessive genes only manifest when the genes are homozygous
- B. The condition usually affects females
- ~~C. They are transmitted by healthy male carriers.~~
- D. Male offspring of a male with the disorder inherit the disease
- E. All female offspring of an affected male will be carriers.

3. Which one of the following drugs used in the treatment of tuberculosis is correctly matched with its expected adverse reaction?

- A. Streptomycin - optic neuritis - *Neuritis, deafness*
- ~~B. Isoniazid - hypothyroidism - *Neonatal hypothyroidism*~~
- ~~C. Rifampicin - peripheral neuropathy - *Liver enzyme induction*~~
- D. Pyrazinamide - hepatotoxicity *(hepatotoxicity of rifampicin) is in a week*
- E. Ethambutol - renal failure *renal failure, optic neuritis, peripheral neuropathy*

4. All of the following diseases are classified as spondyloarthropathies EXCEPT:

- A. Ankylosing spondylitis
- B. Psoriatic arthritis
- C. Reactive arthritis
- D. Polyarthritis rheumatica
- E. Enteropathic arthritis

PSA, AS, RA, PsA, ReA, EntA, D. Distal

5. A 25 year old man presents with a 4 month history of swellings on the left lower neck and generalized pruritus. Examination reveals mobile non-tender rubbery lymph nodes. Lymph node biopsy shows features of nodular sclerositis Hodgkin's disease. Bone marrow confirms marrow infiltration. Computerized tomography (CT) scan of the chest, abdomen and pelvis are normal. What is the stage of the disease?

- A. II A
- B. III B
- C. III S
- ~~D. IV~~
- E. IV S

I - Cancer found in one lymph node region
 II - Cancer in 2 or more lymph node regions on same side of diaphragm
 III - Cancer in lymph node areas on both sides of diaphragm
 IV - Cancer spread throughout the body beyond lymph nodes - no one common to a lymph node region, stage 1

6. In a patient with anasarca, 24-hour albumin excretion of 8g and normal glomerular filtration (GFR), the following complications are expected EXCEPT:-

- A. Hypercoagulability
- B. Metastatic calcification
- C. Atherosclerosis
- D. Susceptibility to infections
- E. Hypoatremia

7. A 60 year old man presents to his doctor for a medical check. He is found to have a random blood sugar (RBS) of 7mmol/L. An oral glucose tolerance test (OGTT) done showed fasting blood glucose of 6.2 mmol/L, 2 hour post glucose load of 14.4 mmol/L. Which of the following statements is TRUE regarding this patient?

- A. He has diabetes mellitus
- B. He has impaired glucose tolerance
- C. He has metabolic syndrome
- D. He should have fasting lipid assay to determine the diagnosis
- E. Another OGTT should be done in 6 months to determine his diagnostic status

8. A 22 year old man presents to the emergency department with a 3 day history of fever, cough and pleuritic chest pain. His temperature is 39°C, pulse rate is 110 beats/min and respiratory rate is 26 beats/min. Chest radiograph reveals an opacity in the right lower lung zone. Which of the following is the MOST common cause of the condition?

- A. *Candida albicans*
- B. *Pseudomonas aeruginosa*
- C. *Mycoplasma pneumoniae*
- D. *Staphylococcus aureus*
- E. *Streptococcus pneumoniae*

↳ pneumonia - upper lobe pneumonia

9. A 12 year old boy develops migratory joint pain involving large joints 2 weeks after a sore throat. He has a tachycardia of 110 beats/min, and a systolic murmur at the apex. Which of the following statements is TRUE concerning his clinical presentation?

- A. The micro-organism causing the sore throat is likely to be *Staphylococcus aureus*
- B. Blood cultures usually yield the offending organism
- C. The heart involvement is usually pancarditis
- D. Erythema nodosum is expected ~~↳ Juvenile rheumatoid arthritis, Drugs Sulphonamide~~
- E. Shortened PR interval is found on the electrocardiogram (ECG)

10. A 20 year old man presents with 3 months history of bloody mucoid diarrhea. Colonoscopy shows diffuse erythema and ulcerations in the entire colon and patchy ulceration in the terminal ileum. The MOST likely diagnosis is:-

- A. Ulcerative colitis
- B. Crohn's disease ~~↳ Skip lesions, granulomatous inflammation~~
- C. Amoebic colitis
- D. Shigellosis
- E. Tuberculous enteritis

11. A patient presents with oral lesions for 1 month. He has flaccid vesicles and bullae on the trunk and limbs. Nikolsky sign is positive. The MOST likely diagnosis is:-
 ↑ *Toward is TEN & pemphigus vulgaris*

- A. Erythema multiforme major
- B. Mucous membrane pemphigoid
- C. Bullous pemphigoid
- D. Pemphigus foliaceus
- ~~E. Pemphigus vulgaris~~ *vesicle bullous dx.*

12. A 25 year old man with history of HIV disease presents with a history of chronic headache. Neurological examination is normal. CT scan reveals a contrast enhancing ring lesion on the left parietal lobe. The MOST appropriate approach would be:-

- A. Biopsy the lesion
- B. Start patient on steroids
- C. Start patient on empirical antibiotics
- ~~D. Start patient on empirical anti-toxoplasmosis treatment~~
- E. Start patient on intravenous acyclovir

13. The following are the results of cerebrospinal fluid (CSF) obtained from a 40 year old man with meningitis

- Protein 100g/l
- Glucose 1mmol/l
- White cell count 2000 cells/ μ l, predominantly lymphocytes
- Gram stain negative

These findings are compatible with:-

- A. Pyogenic meningitis
- B. Viral meningitis
- ~~C. Tuberculous meningitis~~
- D. Sarcoidosis
- E. Cryptococcal meningitis

*14. Which one of the following is the MOST important attribute necessary for a screening test? :

- ~~A. Sensitivity~~ *- high possibility for having dx*
- B. Specificity
- C. Positive predictive value (PPV) *- no of true +ve / no of +ve test*
- D. Negative predictive value (NPV) *- $\frac{TN}{TN+FN}$*
- E. Receiver-operator curve (ROC)

15. All of the following statements regarding *Plasmodium falciparum* are true EXCEPT:- *benzene*

- A. It causes more severe disease in pregnancy
- ~~B. It is associated with recurrent chills after effective initial treatment~~
- C. It is the only malarial parasite causing greater than 20% parasitemia
- D. Infection is associated with thrombocytopenia
- ~~E. It is the only cause of cerebral malaria.~~

16. All of the following are diagnostic criteria for polymyositis EXCEPT:-

- A. Elevated creatine kinase
- B. Proximal muscle weakness
- C. Myopathic electromyogram (EMG)
- D. Typical changes on muscle biopsy
- E. Heliotrope rash

17. A 13 year old boy presents with long-standing mild jaundice, moderate pallor and moderate splenomegaly. The MOST likely diagnosis is:-

- A. Sickle cell anaemia
- B. Non-Hodgkin's lymphoma
- C. ~~B-thalassaemia~~
- D. Chronic myeloid leukemia *myeloid plasma*
- E. Myelofibrosis

18. A 56 year old man presents with severe low back pain, lumbar spine tenderness and general ill health. He has pallor and mild ankle oedema. Investigations show haemoglobin 6g/dl, MCV 80fl, ESR 110mm/hr serum albumin 30g/l, total protein 130g/l. Xrays show compression fracture L3 to L5 and osteolytic lesions in the pelvic bones. Common causes of renal failure in this condition include all the following EXCEPT:

- A. Neurogenic bladder
- B. Hypercalcemia ✓
- C. Hyperuricemia ✓
- D. Proteinuria ✓
- E. Hyperparathyroidism

✓ thalidomide
✓ melphalan - not for BM transplant.
✓ prednisolone

protein → 56-83.
albumin → 35-53.

✓ skeletal survey, renal failure.
✓ serum/urinary B-protein
✓ BMA - clonal plasma cells.

mm³

19. A 28 year old woman is followed up for thyrotoxicosis. She is on antithyroid medication. Which one of the following clinical parameters will closely reflect her thyroid hormone status?

- A. Emotional variability (moods) (✓)
- B. Menstrual patterns
- C. Palpitations
- D. Sleep patterns
- E. Weight

20. All of the following interventions are beneficial in the management of patients with chronic obstructive airway disease (COPD) EXCEPT:-

- A. Pneumococcal vaccination
- B. Cessation of smoking ✓
- C. Short acting bronchodilators ✓
- D. Inhaled anticholinergics ✓
- E. High tension oxygen therapy

21. All of the following auscultatory findings are expected in mitral stenosis EXCEPT:-
- A. Mid-diastolic murmur ✓
 - ~~B.~~ Soft first heart sound
 - C. Presystolic murmur accentuation
 - ~~D.~~ Opening snap ✓
 - E. Loud second heart sound
22. A patient presents with massive haematemesis for 1 day. Endoscopy reveals acutely bleeding oesophageal varices. All of the following treatments would be recommended EXCEPT:-
- A. Sclerotherapy ✓
 - B. Propranolol infusion
 - ~~C.~~ Octreotide infusion
 - ~~D.~~ Nasogastric tube insertion ✓
 - E. Band ligation ✓
23. A 25 year old woman presents with erosion, weeping and crusted lesions on 30% body surface area. The plan of management should include all of the following EXCEPT:-
- A. Septic screen
 - ~~B.~~ Saline soaks ✓
 - C. Infection control ✓
 - D. Keep warm
 - E. Emollients
24. A 58 year old man with HIV develops a vesicular eruption along the left side of the ribcage. The eruption is preceded by days of tingling and burning sensation. Which one of the statements is **TRUE** regarding the condition?
- A. Corticosteroids should be started immediately ✓
 - ~~B.~~ Early acyclovir reduces the duration of symptoms
 - ~~C.~~ Previous *Herpes simplex virus* infection is associated with this presentation ✓ - (caused by varicella)
 - D. Disappearance of the rash is associated with disappearance of symptoms in all the patients
 - E. Amitryptilline has no role in the management of this condition
- *25. A 50 year old man presents with history of wasting of the small muscles of the hand associated with dysarthria and dysphagia. Examination reveals spastic immobile tongue, wasted muscles of the hands with increased deep tendon reflexes. All of the following statements are true regarding the condition EXCEPT:-
- A. Autosomal dominant inheritance
 - ~~B.~~ Cause of death is usually respiratory
 - C. Is associated with nystagmus
 - D. Responds to steroids
 - E. Sphincteric involvement is a late complication

26. You notice in the locker room one of your colleagues injecting himself with pethidine. What would be your **MOST** appropriate actions?

- A. Report to the supervisor
- B. Counsel your colleague yourself
- C. Pretend you did not see him
- D. Ask your senior colleague to talk to him
- E. Report him to the director of the hospital

27. A 28 year old man presents with painful micturition and a purulent urethral discharge for 2 days. Which one of the following is **NOT** an appropriate drug for his treatment?

- A. Ciprofloxacin ✓
- B. Ceftriaxone
- C. Amoxicillin
- D. Azithromycin ✓
- E. Doxycycline ✓

*28. Which one of the following is **NOT** a feature of fibromyalgia?

- A. Anxiety ✓
- B. Fatigue ✓
- C. Irritable bowel syndrome (IBS)
- D. Scleritis
- E. Sleep disturbance ✓

29. A 30 year old man presents with general body weakness. Physical examination reveals pallor and koilonychia. Which one of the following is the **MOST** likely positive laboratory finding?

- A. Presence of *Ascaris lumbricoides* ova in his stool ✗
- B. Presence of *Taenia saginata* ova in his stool ✗
- C. Increased faecal stercobilinogen ✗
- D. Mean corpuscular volume (MCV) of 59fl ✓
- E. Reduced total iron binding capacity (TIBC) ✓ *Not total iron binding capacity.*

*30. Which one of the following renal disease is well matched to renal imaging findings?

- A. Chronic glomerulonephritis - bilateral contracted echogenic kidneys ✓
- B. Obstructive uropathy - echogenic kidneys
- C. Chronic pyelonephritis - enlarged globular kidneys ✓
- D. HIV nephropathy - bilateral small scarred kidneys ✓
- E. Acute tubular necrosis - dilated calyces. ✓

31. The metabolic syndrome is defined by the presence of all the following characteristics **EXCEPT**:-

- A. Abdominal obesity
- B. Hypertension
- C. High high-density lipoprotein(HDL) - cholesterol
- D. Hypertriglyceridemia
- E. Impaired glucose tolerance

32. All of the following findings are compatible with a diagnosis of *Pneumocystis jirovecii* pneumonia EXCEPT:-
- A. Elevated white blood cell count ✓
 - B. Low CD₄ count ✓
 - C. Elevated lactate dehydrogenase (LDH) in blood ✓
 - ~~D.~~ Marked hypoxia on arterial blood gas analysis ✓
 - E. Butterfly appearance on chest radiograph ✓
33. A 65 year old man complains of palpitations. ECG shows irregular QRS complexes with absent P-waves. The diagnosis is :-
- A. Atrial flutter
 - ~~B.~~ Atrial ectopics
 - C. Atrial fibrillation
 - D. Heart block
 - E. Ventricular fibrillation.
34. A 25 year old man is diagnosed with chronic hepatitis B infection. He has high hepatitis B virus (HBV) DNA at 100 million IU/ml. All of the following investigations would be required before initiation of treatment EXCEPT:-
- ~~A.~~ Liver function tests (LFT)
 - ~~B.~~ Hepatitis B e antigen (HBeAg) test
 - ~~C.~~ Hepatitis B core antigen (HBcAg) test
 - D. Hepatitis C virus screen
 - E. Thyroid function tests (TFTs)
35. A 30 year old man presents with scaly papules and plaques. The differential diagnoses include all the following EXCEPT:-
- A. Lichen planus
 - B. Psoriasis vulgaris
 - ~~C.~~ Discoid dermatitis
 - D. Pityriasis rosea
 - E. Morphoea
36. A HIV positive woman has generalized cervical lymphadenopathy. Fine needle aspiration (FNA) cytology confirms tuberculous adenitis. Her CD₄ count is 60 cells/ul. She is started on antituberculous treatment and HAART simultaneously. 4 weeks later she develops fever and increasing enlargement of the lymph nodes. Which one of the following would be the CORRECT approach to her management?
- ~~A.~~ Stop the anti-tuberculous therapy
 - ~~B.~~ Stop the anti-retroviral therapy
 - ~~C.~~ Start on prednisone immediately
 - D. Add a broad spectrum antibiotic
 - E. Give an antipyretic and continue therapy

37. A 60 year old hypertensive and diabetic man who has previously been well is found in the morning with weakness of the right side. He is rushed to the hospital where he arrives in 1 hour. Computerized tomography (CT) scan of the head reveals an infarct. Which of the following would be the **MOST** effective treatment?
- A. Aspirin
 - B. Clopidogrel
 - C. Atorvastatin
 - D. Intravenous tissue plasminogen activator (TPA)
 - E. Dipyridamole
38. Which of the following deficiency is found in patients with terminal ileum disease?
- A. Calcium
 - B. Iron
 - C. Folic acid
 - D. Tryptophan
 - E. Cobalamin
39. A 41 year old man admitted for management of heart failure develops a cough, chest pain and fever after 1 week in the hospital. Which one of the following antibiotics is the **BEST** empiric choice?
- A. Amoxicillin - clavulanic acid
 - B. Clarithromycin
 - C. Ceftazidime ✓
 - D. Cefuroxime
 - E. Flucoxacin
40. A 43 year old man presents with 8 week history of symmetrical joint pain and swelling involving the metacarpal-phalangeal (MCP) metatarsal - phalangeal (MTP) and proximal interphalangeal (PIP) joints. Symptoms are worse in the morning and last for 1 hour. Which one of the following statements is **TRUE** of this condition?
- A. Non-steroidal anti-inflammatory drugs (NSAIDs) are the first line of therapy
 - B. Extra-articular manifestations is not a feature ✗
 - C. Radiological investigation is required for the diagnosis
 - D. Disease modifying therapy should be instituted immediately
 - E. Biologic agents have no role in its management y
41. In a 60 year old man with multiple myeloma and a fracture of the right femur, which one of the following is the **MOST** appropriate approach to management?
- A. Start melphalan and radiotherapy
 - B. Start melphalan then refer for bone marrow transplantation
 - C. Start analgesics, internally fix the fracture then administer radiotherapy
 - D. Administer radiotherapy then internally fix the fracture
 - E. Start neoadjuvant thalidomide then internally fix the fracture.

42. Which one of the following disease process is well matched with the renal manifestation?
- A. Syphilis – obstructive uropathy
 - B. *Plasmodium malariae* infection – nephrotic syndrome
 - C. Systemic lupus erythematosus – acute tubular necrosis
 - D. *Schistosoma haematobium* infection – Fanconi syndrome
 - E. Rheumatoid arthritis – acute glomerulonephritis
43. A 46 year old man with diabetes presents with right foot ulceration without gangrene. It is septic with malodorous smell. HbA_{1c} is 8.5%, dorsalis pedis pulses are good. *Staphylococcus aureus* and *Klebsiella sp.* have been isolated from the wound swab. The following actions are appropriate **EXCEPT**:-
- A. Daily hydrogen peroxide soaks
 - B. Intravenous antibiotics
 - C. Daily saline soaks
 - D. Platelet – derived growth factor dressing
 - E. Insulin therapy
44. A 65 year old man with 25 pack years of smoking presents with cough, weight loss and breathlessness. A chest radiograph shows a right apical homogeneous round opacity. All of the following findings are known to be associated with this presentation **EXCEPT**:-
- A. Hyperpigmentation of the palms
 - B. Radicular pain to the right hand
 - C. Hypocalcemia
 - D. Hoarseness of the voice
 - E. Haemoptysis
45. A patient presenting with non-ST elevation acute coronary syndrome will benefit from all of the following therapeutic interventions **EXCEPT**:-
- A. Thrombolysis
 - B. Combined clopidogrel and aspirin therapy
 - C. Enoxaparin therapy
 - D. Beta-blocker therapy
 - E. Nitrates
46. A 70 year old man presents with generalized pruritus and weight loss. Clinical examination reveals green jaundice and a palpable non-tender gall bladder. Which of the conditions listed below is the **MOST** likely diagnosis?
- A. Acute cholecystitis
 - B. Cholelithiasis
 - C. Hepatocellular carcinoma
 - D. Pancreatic malignancy
 - E. Cholangiocarcinoma

47. A 20 year old patient presents with pruritic lesions on the neck, antecubital and popliteal fossae since 2 year of age. The lesions are lichenified, excoriated and crusted patches. The **MOST** likely diagnosis is:-
- A. Atopic dermatitis
 - B. Seborrhoeic dermatitis
 - C. Allergic contact dermatitis
 - D. Nummular dermatitis
 - E. Dyshidrotic dermatitis
48. In a HIV positive patient with cryptococcal meningitis and CD4 count of 40 cells/uL, which one of the following approaches would be the **MOST** appropriate?
- A. Amphotericin B plus fluconazole for 2 weeks, serial lumbar punctures and HAART initiation at 2 weeks
 - B. HAART and amphotericin B plus fluconazole initiation simultaneously, serial lumbar punctures
 - C. HAART for 2 weeks followed by amphotericin B plus fluconazole, serial lumbar punctures.
 - D. Amphotericin B plus fluconazole for 2 weeks, serial lumbar punctures; then fluconazole. HAART initiation after 5 weeks
 - E. HAART for 5 weeks; serial lumbar punctures. Initiation of amphotericin B plus fluconazole after 5 weeks.
49. A 40 year old alcoholic goes to bed and wakes up in the morning with a wrist drop. The **MOST** likely nerve injury is?
- A. Radial nerve
 - B. Ulnar nerve
 - C. Musculocutaneous nerve
 - D. Median nerve
 - E. Axillary nerve
50. A 28 year old man presents with pain and swelling of his left leg 3 days after a thorn prick. Which one of the following antibiotics is the **BEST** empiric choice?
- A. Ciprofloxacin
 - B. Clarithromycin
 - C. Metronidazole
 - D. Amoxicillin – clavulanic acid
 - E. Nitrofurantoin
51. All of the following statements are true regarding gout **EXCEPT**:-
- A. The 1st metatarsal –phalangeal joint is commonly involved
 - B. Renal failure is a known complication
 - C. It can present with extra-articular manifestations
 - D. It is common in pre-menopausal women
 - E. It results from monourate sodium deposition

52. Which one of the following is TRUE regarding chronic myeloid leukemia (CML)?
- ~~A.~~ It is almost exclusively a disease of children
 - ~~B.~~ Leucocyte alkaline phosphatase (LAP) score is reduced
 - ~~C.~~ Lymphadenopathy is common in the stable state
 - ~~D.~~ Autosplenectomy occurs ✓
 - E. Spontaneous fractures tend to occur
53. Which one of the following conditions is associated with dilutional hyponatraemia?
- ~~A.~~ Congestive heart failure
 - B. Acute tubular necrosis
 - C. Gastroenteritis
 - D. Hypothyroidism
 - E. Hypercholesterolaemia
54. A 36 year old man with longstanding bronchial asthma has been on prednisolone 30mg/day for several years. Now he has cushingoid features. The other findings expected in this patient include all of the following EXCEPT:-
- A. Systemic hypertension
 - B. Bone pains
 - C. Normal libido
 - D. Agitated behaviour
 - E. Raised intra-ocular pressures
55. All of the following are danger signs in status asthmaticus EXCEPT:-
- A. Pulse rate of 115 beats/min
 - B. Inability to complete sentences
 - C. Respiratory rate of 36 breaths/min
 - D. Inability to perform peak flow measurements
 - E. Blood pressure of 90/60 mm Hg
56. All of the following pharmacotherapies have been shown to prolong survival in patients with non-valvular heart failure EXCEPT:-
- A. Spironolactone - ~~ADY~~
 - B. Carvedilol
 - C. Angiotensin converting enzyme inhibitors (ACE I)
 - D. Angiotensin receptor blockers (ARB)
 - ~~E.~~ Loop diuretics
57. A 35 year old man presents with heartburn and a feeling of regurgitation after meals. He frequently clears his throat while talking. Upper gastrointestinal tract (GIT) endoscopy is reported as normal. This condition is associated with all of the following features EXCEPT:-
- A. Poor quality of life
 - B. Increased incidence of malignancy
 - C. Barrett's oesophagus
 - D. Recurrent bronchospasm
 - ~~E.~~ Increased incidence of *Helicobacter pylori*

*Mortality
signs
& veches*

58. A 15 year old boy presents with insidious onset of pruritic eruption on the interdigital clefts, flexor aspects on the wrists and gluteal cleft. The lesions comprise of papules, vesicles, pustules and burrows. The MOST likely diagnosis is:-
- A. Larval migrans
B. Papular urticaria
 C. Urticaria pigmentosa
D. Scabies
E. Dermatitis herpetiformis
- Arachnids
- Tx bedding
- hot water
- permethrin
- hot contacts*
59. A 34 year old HIV positive man presents with a 3 week history of severe headaches and photophobia. His CD4 count is 36 cells / μ l. He further reports that 2 months back, he had similar headaches, was admitted and given 2 weeks of amphotericin B for confirmed "fungal meningitis". He did not go for follow-up after discharge. What is the MOST useful test to confirm the diagnosis now?
- A. Cerebrospinal (CSF) cryptococcal antigen (CRAG) test
B. Serum CRAG test
 C. India ink in CSF
D. CSF fungal culture
E. CSF protein level
- 1
- dx progression
- chances of recurrence
- treatment response or relapse*
60. A 30 year old woman presents with a 2 week history of progressive weakness. She has found it difficult to rise from a sitting position and comb her hair. Examination reveals normal deep tendon reflexes and sensory modalities. All of the following statements are true regarding her illness EXCEPT:-
- A. It responds to steroids
 B. It is associated with elevated muscle enzymes
C. It is associated with acetylcholine receptor antibodies
D. It is associated with malignancies
E. Dysphagia occurs
- proximal myopathy
- polymyositis
- dermatomyositis
fatigue - MG
pain at rest - inflammatory
oakley arm muscle - jerk*
61. A 60 year old man presents with a 1 day history of headache, fever and neck stiffness. Which one of the following organisms is NOT likely to cause this presentation?
- A. *Streptococcus pneumoniae*
 B. Group A β -hemolytic *Streptococcus pyogenes*
C. *Haemophilus influenzae*
D. *Neisseria meningitidis*
E. *Listeria monocytogenes* *old > 55 yr old, 9/10/02*
62. All of the following indicators are useful in evaluating the success of treatment of rheumatoid arthritis EXCEPT:-
- A. Tender joint count
B. Swollen joint count
C. Markers of inflammation
 D. Number of deformed joints
E. Functional status of the patient

63. Steroid therapy is indicated in the following oncological emergencies EXCEPT:-
- A. Superior vena cava obstruction
 - B. Hypercalcemia
 - C. Severe neutropenic sepsis
 - D. Raised intracranial pressure
 - E. Spinal cord compression

64. A 35 year old man presents with nausea, vomiting and general malaise. He has been hypertensive for 5 years. Laboratory tests show:-
- Urinalysis – protein 3+, RBCs 2+, granular casts
 - Haemoglobin 9.3g/dl, MCV 80fl, WBC $6 \times 10^9/L$, platelets $119 \times 10^9/L$
 - Serum K^+ 5.4 mmol/L, Na^+ 128 mmol/L, urea 28mmol/L, creatinine 837umol/L
 - Renal ultrasound – bilateral contracted kidneys Right = 6.2 x 3.8 cm, Left = 6.32 x 3.3 cm

Which of the following statements is TRUE?

- A. This is acute kidney injury secondary to volume depletion
 - B. This is acute glomerulonephritis
 - C. Renal biopsy should be performed
 - D. Patient requires longterm dialysis
 - E. Patient has hypertensive glomerulosclerosis
65. All of the following are rational combinations of oral glucose lowering medications EXCEPT:-
- A. Metformin/Acarbose/Glimepiride *✓ sulfonylureas*
 - B. Metformin/Repaglinide/Lina, Eptin *✓ biguanides*
 - C. Metformin/Insulin *✓ thiazolidinedione*
 - D. Chlorthalidone/Insulin *✓ α -glucosidase inhibitor*
 - E. Metformin/Linagliptin/Insulin *✓ DPP4 blocker*

66. A 60 year old male has a 20 pack-year history of cigarette smoking. He presents with a productive cough and shortness of breath especially on cold days and associated chest tightness and wheezing. The MOST likely diagnosis is:-
- A. Asthma
 - B. Chronic obstructive pulmonary disease (COPD)
 - C. Heart failure
 - D. Anxiety attack
 - E. Pneumonia

67. An elderly female who is being nursed in hospital for dense hemiplegia from a cerebrovascular accident is suddenly diaphoretic and dyspnoeic. On examination, she is cold, sweaty and tachypnoeic. Her radial pulse is weak and feeble. The electrocardiogram (ECG) is significant only for sinus tachycardia. All of the following investigations are useful in establishing the diagnosis EXCEPT:-

- A. Cardiac troponin assay - right ventricle MI
- B. D-dimer assay
- C. Computerized tomography (CT)-pulmonary angiography
- D. Blood sugar analysis
- E. Chest radiograph

68. All of the following statements regarding irritable bowel syndrome (IBS) are true

EXCEPT:-

- A. Presents with increased loose watery stools - altered bowel habits
 - B. Diarrhoea often occurs at night - pain relieved by defecation.
 - C. The stool never contains blood - pellets, mucoid, bloating.
 - D. Constipation is sometimes the predominant symptom? - tenesmus.
 - E. Abdominal pain is often relieved by defecation - diarrhoea.
- No nocturnal symp.

69. AIDS-defining mucocutaneous disorders include all of the following **EXCEPT:-**

- A. Oesophageal candidiasis
 - B. Kaposi's sarcoma
 - C. Cutaneous cryptococcosis
 - D. Herpes simplex ulcers
 - E. Pyoderma gangrenosum
- Aids defining
- oral & pharyngeal candida.
- KS
- cut. crypto
- HSV ulcers.
oral hairy leukoplakia
- stings
- P & P
- C. acuminata
- M. contag
- U.C., R.A., MM, DM.

70. A 26 year old woman presents with a 2 week history of change in speech and a tongue that deviates to the right side on protrusion. Which cranial nerve is involved?

- A. Right glossopharyngeal
- B. Left glossopharyngeal
- C. Right hypoglossal
- D. Left hypoglossal
- E. Left vagus

71. A 26 year old woman presents with history of chronic cough. She reports that she was on treatment for tuberculosis which she stopped 3 weeks prior after having taken it for 25 days. Which one of the following is **NOT** appropriate in the approach to her management?

- A. Restart anti-tuberculous treatment with rifampicin, isoniazid, pyrazinamide and ethambutol
- B. Restart anti-tuberculous treatment with rifampicin, isoniazid, pyrazinamide, ethambutol and streptomycin
- C. Send sputum for acid fast bacilli staining
- D. Send sputum for genexpert MTB/RIF
- E. Apply directly observed therapy

72. A 13 year old boy presents with a 2 day history of fever, right knee pain and swelling. There were no precipitants to this illness. Which one of the following statements is **TRUE** regarding this condition?

- A. Intra-articular steroids are useful in the management
- B. Analgesia, oral antibiotics and bedrest is the gold standard in the management
- C. Antibiotics should be withheld until results of the gram stain are obtained
- D. Intra-articular antibiotics are useful
- E. Needle aspiration and drainage of the joint is warranted

73. A middle-aged man is reviewed in the outpatient clinic with complaints of abdominal swelling for several weeks. Physical examination reveals splenomegaly extending 10 cm below the costal margin. All of the following are likely causes EXCEPT:-
- A. Chronic myeloid leukemia
 B. Miliary tuberculosis
 C. Myelofibrosis
 D. Visceral leishmaniasis
 E. Hyper-reactive malarial splenomegaly (HMS)
- Handwritten notes for Q73: Malaria, myelofibrosis, MUM, leishmaniasis, Gulliver's, Malaria, EBV, IE, Schisto, Portal hypertension, HA, Leukemia, Lymphoma, CT dx.
74. Which one of the following statements is TRUE concerning urinary tract infections?
- A. *Staphylococcus aureus* is the commonest organism among sicklers
 B. *Proteus spp.* infection is associated with calculi
 C. Treatment of *Candida* infections predisposes one to bacterial infections
 D. Haematogenous route of infection is the commonest origin
 E. In men, infections are usually associated with sexual intercourse
- Handwritten notes for Q74: E. coli is common, HA, S. E. coli, S. aureus, Idiopathic, T.B.
75. All of the following are established risk factors for diabetic foot ulcer disease EXCEPT:-
- A. Diabetic cardiomyopathy
 B. Chronic kidney disease stage 3 and higher
 C. Macular eye disease
 D. Peripheral neuropathy
 E. Claw-toe deformity
76. Which one of the following is NOT a recognized risk factor for the development of deep venous thrombosis?
- A. Hormonal contraceptive therapy
 B. Protein C deficiency
 C. Heart failure
 D. Anti-phospholipid syndrome
 E. Hypertension
77. Which of the following is NOT a cause of constipation?
- A. Hypocalcemia
 B. Hypothyroidism
 C. Aluminium containing antacids
 D. Cerebrovascular accidents
 E. Atorvastatin
- Handwritten notes for Q77: hypocalcemia, constipation, psoriasis, constipation.
78. All of the following are risk factors for haemorrhagic stroke EXCEPT:-
- A. Cocaine use
 B. Cigarette smoking
 C. Amyloid angiopathy
 D. Aneurysm
 E. Warfarin use
- Handwritten notes for Q78: BVA, Drugs, Blood clotting.

79. A tourist suffered a bout of watery diarrhoea which became mucoid and blood stained. He had fever and developed severe joint pains a few weeks later. Rheumatoid factor was negative. All of the following statements are true regarding the disease EXCEPT:-
- A. *Shigella flexneri* is the causative organism
 - B. There is high circulating bacterial antigen
 - C. Culture of *Neisseria gonorrhoea* will be obtained from joint aspirate
 - D. It is associated with HLA B27 genotype
 - E. It is associated with serum leucocytosis
- chlamydia
- ureoplasma
- gonorrhoea
Reactive Arth
- urethritis
- Arthrit
- conjunctiv

80. A 45 year old woman with a diagnosis of rheumatoid arthritis has been on methotrexate and prednisone for 2 years. Which one of the following complications is NOT likely to be due to her chronic steroid use?
- A. Cataract formation
 - B. Peptic ulcer disease
 - C. Diabetes mellitus
 - D. Liver disease
 - E. Hypertension

81. A strict vegetarian presents with general malaise, exertional dyspnoea and pallor. Peripheral blood film shows segmented neutrophils and the mean corpuscular volume (MCV) is 110fl. Which one of the following statements is TRUE?
- A. Gum hypertrophy occurs
 - B. Serum ferritin levels are low
 - C. Bone marrow Prussian blue stain is negative
 - D. Paraesthesias are common
 - E. Condition is invariably fatal

82. A 30 year old man has just been diagnosed with HIV. He presents to the clinic with complaints of unintentional weight loss despite a good appetite. His initial weight was 70Kg. He has lost 8 Kg over the past 3 months. Physical exam reveals generalized lymphadenopathy. What is his current WHO stage?
- A. Stage 0
 - B. Stage 1
 - C. Stage 2
 - D. Stage 3
 - E. Stage 4

83. A 28 year old woman presents with goitre. Thyroid profile showed TSH = 0.000m Iu/L, FT4 = 30ng/L, FT3 = 12 pmol/L. Ultrasound showed a thyroid nodule in the right lobe, the rest had normal echodensity. Which of the following treatments is LEAST appropriate for her?

- A. Propranolol
- B. Propylthiouracil
- C. Lugol's iodine
- D. Methylprednisolone
- E. Surgery

toxic adenoma

TSH - 0.5 - 5.7 ↓ 0.2 - 4.5

T4 - 70 - 140 ↓ 9 - 21

T3 - - 0.9 - 2.4

TSH → 4.0 hyper T.

adeno.

84. Which of the following conditions is **NOT** a recognized cause of cardiogenic syncope?
- A. Pulmonary embolism
 - B. Ventricular fibrillation
 - C. Postural hypotension
 - D. First degree heart block
 - E. Third degree heart block
85. A 45 year old man with liver cirrhosis and bleeding tendencies and an otherwise normal blood count comes to you for management. Which of the following is the **MOST** appropriate therapy?
- A. Tranexamic acid
 - B. Platelet infusion
 - C. Whole blood transfusion
 - D. Transfusion of packed cells
 - E. Vitamin K
- Vit K
FFP.
Platelets.
blood.*
86. Which of the following drugs is **LEAST** useful in myoclonic epilepsy?
- A. Ethosuximide
 - B. Carbamazepine
 - C. Sodium valproate
 - D. Clonazepam
 - E. Lamotrigine
- phenytoin
carbamazepine
ethosux.
gabapentin.*
87. Modifiable risk factors for osteoarthritis include all of the following **EXCEPT**:-
- A. Age
 - B. Race
 - C. Female gender
 - D. Obesity
 - E. Prior inflammatory joint disease
88. Which one of the following is **NOT** a risk factor for hepatocellular carcinoma?
- A. Heavy alcohol consumption
 - B. Exposure to aflatoxins
 - C. Hepatitis A virus
 - D. Hepatitis B virus
 - E. Hepatitis C virus E
89. Which one of the following statements is **TRUE** regarding diabetic nephropathy?
- A. Stage 2 is characterized by microalbuminuria
 - B. Hyperfiltration is only evident in late stages
 - C. The microalbuminuria stage is potentially reversible
 - D. Microalbuminuria precedes the glomerular structural changes
 - E. Stage 4 patients need to be started on dialysis

90. All of the following are evidence-based therapeutic lifestyle changes in the control of systemic arterial hypertension EXCEPT:-
- A. Moderation of alcohol ingestion
 - B. Reduced dietary salt ingestion
 - C. Lower dietary potassium intake
 - D. Stress management
 - E. Regular aerobic exercise
91. A 30 year old pregnant woman is found to be hepatitis B surface antigen (HBs Ag) positive. She is concerned about transmitting the virus to her unborn infant. Which of the following factors is MOST useful in determining the risk of transmission?
- A. Hepatitis B e antigen (HBeAg) status
 - B. Hepatitis B core immunoglobulin G (HBcIgG) status
 - C. Alanine aminotransferase (ALT) 23 IU/L
 - D. Her alcohol history
 - E. Aspartate aminotransferase (AST)/ALT ratio ≥ 2
92. A 38 year old woman presents with a 1 month history of bilateral numbness of the lower limbs. Examination is notable for reduced vibration sense and reduced ankle reflexes. All of the following tests are useful in this patient EXCEPT:-
- A. Serum sodium
 - B. Serum creatinine
 - C. Thyroid stimulating hormone
 - D. Glycosylated haemoglobin
 - E. Haemoglobin level
93. A 25 year old woman presents with gradual skin tightening involving the hands and face. She also has first degree heart block on the ECG and reflux oesophagitis. Which one of the following statements is TRUE regarding this condition?
- A. It is commoner in males compared to females
 - B. It is easily amenable to treatment
 - C. Raynaud's phenomenon is an invariable feature
 - D. It has no renal manifestations
 - E. It is usually an indolent disease
- indolent onset.
limited cutaneous
systemic sclerosis.
antiretroviral*
94. A 16 year old girl has bilateral haemarthrosis of elbow joints. She has a fluctuant right knee that is tender. She is bleed from a venepuncture site for the past 24 hours. Which one of the following is the MOST likely diagnosis?
- A. Classical hemophilia
 - B. Christmas disease
 - C. Von Willebrand's disease
 - D. Disseminated intravascular coagulopathy (DIC)
 - E. Protein C deficiency
95. All of the following are features of minimal change glomerulonephritis EXCEPT:-
- A. Heavy proteinuria
 - B. Hypertension
 - C. Corticosteroid responsiveness
 - D. Lack of active sediment in urine
 - E. Hypercholesterolemia

96. A 20 year old woman presents with a history of sudden onset of confusion. This is followed by a severe episode of generalized tonic-clonic seizure. Before the onset of the seizure, she had reported a funny smell. Examination reveals a temperature of 38°C , confusional state with no evidence of meningeal irritation. Which of the following would be the MOST effective treatment in this condition?

- A. Acyclovir
- B. Gancyclovir
- C. Anti-tuberculous treatment
- D. High dose steroids
- E. Ceftriaxone with vancomycin

97. Low voltages on a 12-lead ECG occur in all the following conditions EXCEPT-

- A. Amyloid heart
- B. Chronic obstructive pulmonary disease (COPD)
- C. Pericarditis
- D. Obesity
- E. Pericardial effusion

98. A 22 year old man presents with a 6-month history of left upper quadrant discomfort and early satiety. 2 days prior to presentation, he developed priapism. Abdominal exam revealed splenomegaly 12 cm below left costal margin. White blood cell count (WBC) is $279 \times 10^9/\text{L}$, haemoglobin is 9.4g/dL and platelets $702 \times 10^9/\text{L}$. What is the MOST appropriate next investigation to confirm the diagnosis?

- A. Abdominal ultrasound scan
- B. Erythropoietin level
- C. Haemoglobin electrophoresis
- D. Bone marrow evaluation
- E. Peripheral blood film

Acute leukaemia

99. Which one of the following statements is TRUE regarding ascites in liver disease?

- A. Thiazides are the diuretics of choice.
- B. Malignant ascites responds well to diuretic therapy
- C. Portal hypertension is a rare cause.
- D. Aldosterone antagonists are the preferred diuretics.
- E. Infectious aetiology is uncommon.

spironolactone (aldosterone antag)

100. A 20 year old woman at 20 weeks gestation presents to the emergency department with dyspnoea class III. On examination, she has a regular pulse rate of 90 beats/min, a non-displaced apex with apical mid-diastolic rumbling murmur with loud first heart sound. Which of the following is the MOST appropriate emergency therapeutic intervention?

- A. Furosemide therapy
- B. Termination of pregnancy
- C. Digoxin therapy
- D. Angiotensin converting enzyme inhibitor (ACEI) therapy
- E. Beta blocker therapy

FOURTH YEAR 2013/2014 MCQ

Kelvin
Muthamwa



UNIVERSITY OF NAIROBI

UNIVERSITY EXAMINATIONS 2013/2014

FIFTH YEAR EXAMINATIONS FOR THE DEGREE OF BACHELOR OF
MEDICINE AND BACHELOR OF SURGERY

HME500: MEDICINE-MCQ

DATE: NOVEMBER 6, 2014

TIME: 9.00 A.M. – 12.00 NOON

INSTRUCTIONS:

1. There are 100 Multiple Choice (MCQs) Questions in this paper. Ensure that your paper has all the questions.
2. Each question has ⁺ONE BEST ANSWER.
3. There is no negative marking for incorrect responses.
4. No mark will be given if more than one answer is marked in a single question.
5. An answer sheet is provided where all your answers should be appropriately marked as per instructions.
6. The examination paper should be left in the examination room.

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A 20 year old woman presents with sudden onset weakness of the right side of the body with normal speech. The MOST likely site of the lesion is?

- A. Middle cerebral artery territory
- B. Brain stem
- C. Pons
- D. Cerebellar peduncle
- E. Medulla

Which one of the following statements is TRUE regarding characteristics of X-linked recessive disorders?

- A. In the male, X-linked recessive genes only manifest when the genes are homozygous
- B. The condition usually affects females
- C. They are transmitted by healthy male carriers
- D. Male offspring of a male with the disorder inherit the disease
- E. All female offspring of an affected male will be carriers

Which one of the following drugs used in the treatment of tuberculosis is correctly matched with its expected adverse reaction?

- A. Streptomycin - optic neuritis
- B. Rifampicin - peripheral neuropathy
- C. Pyrazinamide - hepatotoxicity
- D. Ethambutol - renal failure
- E. Isoniazid - peripheral neuropathy

All of the following diseases are classified as spondyloarthropathies EXCEPT:

- A. Ankylosing spondylitis
- B. Psoriatic arthritis
- C. Reactive arthritis
- D. Polymyalgia rheumatica
- E. Enteropathic arthritis

A 25 year old man presents with a 4 month history of swellings on the left lower neck and generalized pruritus. Examination reveals mobile non-tender rubbery lymph nodes. Lymph node biopsy shows features of nodular sclerosing Hodgkin's disease. Bone marrow confirms marrow infiltration. Computerized tomography (CT) scan of the chest, abdomen and pelvis are normal. What is the stage of the disease?

- I A
- II A
- III B
- III S
- IV S

more lymph nodes in regional lymph nodes
 more lymph nodes in regional lymph nodes
 more lymph nodes in regional lymph nodes
 more lymph nodes in regional lymph nodes
 more lymph nodes in regional lymph nodes

6. In a patient with anasarca, 24-hour albumin excretion of 8g and normal glomerular filtration (GFR), the following complications are expected EXCEPT: - ^{hypertension} ^{hypocalcaemia} ^{hypokalaemia} ^{hypomagnesaemia}

- A. Hypercoagulability
- B. Metastatic calcification
- C. Atherosclerosis
- D. Susceptibility to infections
- E. Hyponatremia

7. A 60 year old man presents to his doctor for a medical check. He is found to have a random blood sugar (RBS) of 7mmol/L. An oral glucose tolerance test (OGTT) done showed fasting blood glucose of 6.2 mmol/L, 2 hour post glucose load of 14.4 mmol/L. Which of the following statements is TRUE regarding this patient?

DM
RBS = 11.20
FBS →
susceptible for
metabolic syndrome
Central obesity
pre-diabetes
Bp 8
Tgs
↓ HbA1c
↑ FPG

- A. He has diabetes mellitus
- B. He has impaired glucose tolerance
- C. He has metabolic syndrome
- D. He should have fasting lipid assay to determine the diagnosis
- E. Another OGTT should be done in 6 months to determine his diagnostic status

8. A 22 year old man presents to the emergency department with a 3 day history of fever, cough and pleuritic chest pain. His temperature is 39°C, pulse rate is 110 beats/min and respiratory rate is 26 beats/min. Chest radiograph reveals an opacity in the right lower lung zone. Which of the following is the MOST common cause of the condition?

- A. *Candida albicans*
- B. *Pseudomonas aeruginosa*
- C. *Mycoplasma pneumoniae*
- D. *Staphylococcus aureus*
- E. *Streptococcus pneumoniae*

9. A 12 year old boy develops migratory joint pain involving large joints 2 weeks after a sore throat. He has a tachycardia of 110 beats/min, and a systolic murmur at the apex. Which of the following statements is TRUE concerning his clinical presentation?

- A. The micro-organism causing the sore throat is likely to be *Staphylococcus aureus*
- B. Blood cultures usually yield the offending organism
- C. The heart involvement is usually pancarditis
- D. Erythema nodosum is expected
- E. Shortened PR interval is found on the electrocardiogram (ECG)

10. A 20 year old man presents with 3 months history of bloody mucoid diarrhea. Colonoscopy shows diffuse erythema and ulcerations in the entire colon and patchy ulceration in the terminal ileum. The MOST likely diagnosis is:-

- A. Ulcerative colitis
- B. Crohn's disease
- C. Amoebic colitis
- D. Shigellosis
- E. Tuberculous enteritis

Ex. cl. wash. ileitis

11. A patient presents with oral lesions for 1 month. He has flaccid vesicles and bullae on the trunk and limbs. Nikolsky sign is positive. The MOST likely diagnosis is:-
- A. Erythema multiforme major *subp*
 B. Mucous membrane pemphigoid
 C. Bullous pemphigoid *large blisters more on flexor sides*
 D. Pemphigus foliaceus *crusted lesion*
 E. Pemphigus vulgaris *so - the heavy mixed blisters*
flaccid blisters, old bc diagnosed
subp, pemphigus, crusted lesion
12. A 25 year old man with history of HIV disease presents with a history of chronic headache. Neurological examination is normal. CT scan reveals a contrast enhancing ring lesion on the left parietal lobe. The MOST appropriate approach would be:- *Totiprim*
- A. Biopsy the lesion
 B. Start patient on steroids
 C. Start patient on empirical antibiotics
 D. Start patient on empirical anti-toxoplasmosis treatment - *Spiramycin + Sulphadiazine*
 E. Start patient on intravenous acyclovir
13. The following are the results of cerebrospinal fluid (CSF) obtained from a 40 year old man with meningitis
- Protein 100g/l *45g/dl*
 - Glucose 1mmol/l
 - White cell count 2000 cells/ μ l, predominantly lymphocytes
 - Gram stain negative
- These findings are compatible with:-
- A. Pyogenic meningitis
 B. Viral meningitis
 C. Tuberculous meningitis
 D. Sarcoidosis
 E. Cryptococcal meningitis
14. Which one of the following is the MOST important attribute necessary for a screening test?
- A. Sensitivity } *influenza*
 B. Specificity }
 C. Positive predictive value (PPV)
 D. Negative predictive value (NPV)
 E. Receiver-operator curve (ROC)
15. All of the following statements regarding *Plasmodium falciparum* are true EXCEPT:-
- A. It causes more severe disease in pregnancy
 B. It is associated with recurrent relapses after effective initial treatment
 C. It is the only malarial parasite causing greater than 20% parasitemia
 D. Infection is associated with thrombocytopenia
 E. It is the only cause of cerebral malaria.

16. All of the following are diagnostic criteria for polymyositis EXCEPT:-

- A. Elevated creatine kinase
- B. Proximal muscle weakness
- C. Myopathic electromyogram (EMG)
- D. Typical changes on muscle biopsy
- E. Heliotrope rash — Dermatomyositis

17. A 13 year old boy presents with long-standing mild jaundice, moderate pallor and moderate splenomegaly. The MOST likely diagnosis is:-

- A. Sickle cell anaemia
- B. Non-Hodgkin's lymphoma
- C. β -thalassaemia
- D. Chronic myeloid leukemia
- E. Myelofibrosis

18. A 56 year old man presents with severe low back pain, lumbar spine tenderness and general illhealth. He has pallor and mild ankle oedema. Investigations show haemoglobin 6g/dl, MCV 80fl, ESR 110mmHr serum albumin 30g/l, total protein 130g/l. Xrays show compression fracture L3 to L5 and osteolytic lesions in the pelvic bones. Common causes of renal failure in this condition include all the following EXCEPT:

- A. Neurogenic bladder
- B. Hypercalcemia
- C. Hyperuricemia
- D. Proteinuria — Paraprotein
- E. Hyperparathyroidism ✓

19. A 28 year old woman is followed up for thyrotoxicosis. She is on antithyroid medication. Which one of the following clinical parameters will closely reflect her thyroid hormone status?

- A. Emotional variability (moods) ✓
- B. Menstrual patterns
- C. Palpitations
- D. Sleep patterns
- E. Weight

20. All of the following interventions are beneficial in the management of patients with chronic obstructive airway disease (COPD) EXCEPT:-

- A. Pneumococcal vaccination ✓
- B. Ceasation of smoking ✓
- C. Short acting bronchodilators ✓
- D. Inhaled anticholinergics ✓
- E. High tension oxygen therapy ✓

26. You notice in the locker room one of your colleagues injecting himself with pethidine. What would be your MOST appropriate actions? A
- A. Report to the supervisor
 - B. Counsel your colleague yourself
 - C. Pretend you did not see him
 - D. Ask your senior colleague to talk to him
 - E. Report him to the director of the hospital

27. A 28 year old man presents with painful micturition and a purulent urethral discharge for 2 days. Which one of the following is NOT an appropriate drug for his treatment?
- A. Ciprofloxacin ^(Cipro, Ofloxacin 1000mg) - 500mg BID
 - B. Ceftriaxone 250mg IM
 - C. Amoxicillin
 - D. Azithromycin - 2g single dose
 - E. Doxycycline - 200mg bid divided at each PO/IV 100-200 bid qd 1000

28. Which one of the following is NOT a feature of fibromyalgia? - disorder of chronic widespread pain, fatigue, sleep disturbance, irritable bowel syndrome, tender points
- A. Anxiety
 - B. Fatigue
 - C. Irritable bowel syndrome (IBS)
 - D. Scleritis
 - E. Sleep disturbance

29. A 30 year old man presents with general body weakness. Physical examination reveals pallor and koilonychia. Which one of the following is the MOST likely positive laboratory finding?
- A. Presence of *Ascaris lumbricoides* ova in his stool
 - B. Presence of *Taenia saginata* ova in his stool
 - C. Increased faecal stercobilinogen
 - D. Mean corpuscular volume (MCV) of 59fl
 - E. Reduced total iron binding capacity (TIBC)

30. Which one of the following renal disease is well matched to renal imaging findings?
- A. Chronic glomerulonephritis - bilateral contracted echogenic kidneys
 - B. Obstructive uropathy - echogenic kidneys
 - C. Chronic pyelonephritis - enlarged globular kidney
 - D. HIV nephropathy - bilateral small scarred kidneys
 - E. Acute tubular necrosis - dilated calyces.

31. The metabolic syndrome is defined by the presence of all the following characteristics EXCEPT:
- A. Abdominal obesity
 - B. Hypertension
 - C. High high-density lipoprotein(HDL) - cholesterol
 - D. Hypertriglyceridemia
 - E. Impaired glucose tolerance

metabolic syndrome
 multiplex risk factor
 cluster of insulin resistance, abdominal obesity, hypertension, hypertriglyceridemia, low HDL cholesterol
 common risk factor for atherosclerosis, type 2 diabetes, stroke, heart failure, chronic kidney disease, and osteoporosis
 hyper TGs
 ↓ HDL
 Page 7 of 20
 Abdominal obesity
 chest pain or SOB
 thrombosis

Complex
 Mildred
 optometrist
 diaphanous
 side diaphanous
 n. on ket
 obs of
 metabolic app

disorder of chronic widespread pain, fatigue, sleep disturbance, irritable bowel syndrome, tender points
 ddx
 hypothyroidism
 RA
 eLF
 poly myalgic rheumatism
 S/S - Pericarditis
 back
 + axial
 scap
 T2
 disturbed sleep
 Cognitive
 Pericarditis
 poor on
 Fluorescein
 Graded
 Antmypt

32. All of the following findings are compatible with a diagnosis of *Pneumocystis jirovecii* pneumonia EXCEPT:-

- A. Elevated white blood cell count (blood count is low)
- B. Low CD4 count ↑
- C. Elevated lactate dehydrogenase (LDH) in blood ↑ (plc of lung injury)
- D. Marked hypoxia on arterial blood gas analysis ↑
- E. Butterfly appearance on chest radiograph ↑

33. A 65 year old man complains of palpitations. ECG shows irregular QRS complexes with absent P-waves. The diagnosis is :-

- A. Atrial flutter (2nd degree)
- B. Atrial ectopics
- C. Atrial fibrillation (irregularly irregular PR, P waves, QRS complex)
- D. Heart block PR prolonged
- E. Ventricular fibrillation.

34. A 25 year old man is diagnosed with chronic hepatitis B infection. He has high hepatitis B virus (HBV) DNA at 100 million IU/ml. All of the following investigations would be required before initiation of treatment EXCEPT:-

- A. Liver function tests (LFT)
- B. Hepatitis B e antigen (HBeAg) test (negative)
- C. Hepatitis B core antigen (HBcAg) test (current infection)
- D. Hepatitis C virus screen
- E. Thyroid function tests (TFTs)

35. A 30 year old man presents with scaly papules and plaques. The differential diagnoses include all the following EXCEPT:-

- A. Lichen planus
- B. Psoriasis vulgaris
- C. Discoid dermatitis
- D. Pityriasis rosea (hypopigmentation)
- E. Morphoea (localized scleroderma) - sclerod by loose collagen deposits → thickening of the skin

36. A HIV positive woman has generalized cervical lymphadenopathy. Fine needle aspiration (FNA) cytology confirms tuberculous adenitis. Her CD4 count is 60 cells/ul. She is started on antituberculous treatment and HAART simultaneously. 4 weeks later she develops fever and increasing enlargement of the lymph nodes. Which one of the following would be the CORRECT approach to her management?

- A. Stop the anti-tuberculous therapy (start)
- B. Stop the anti-retroviral therapy (continue only if life threatening)
- C. Start on prednisone immediately (highly doubtful)
- D. Add a broad spectrum antibiotic (steroids & mycobacteria)
- E. Give an antipyretic and continue therapy

37. A 60 year old hypertensive and diabetic man who has previously been well is found in the morning with weakness of the right side. He is rushed to the hospital where he arrives in 1 hour. Computerized tomography (CT) scan of the head reveals an infarct. Which of the following would be the MOST effective treatment?

- A. Aspirin
- B. Clopidogrel
- C. Atorvastatin
- D. Intravenous tissue plasminogen activator (TPA) *after 6 hrs not med 4.5*
- E. Dipyridainole

38. Which of the following deficiency is found in patients with terminal ileum disease?

- A. Calcium *↓ Vit B12*
- B. Iron *↓ Quasderum*
- C. Folic acid *↓ Ifenun*
- D. Tryptophan
- E. Cobalamin *↓ Vit B12*

39. A 41 year old man admitted for management of heart failure develops a cough, chest pain and fever after 1 week in the hospital. Which one of the following antibiotics is the BEST empiric choice? *HAAP*

- A. Amoxicillin - clavulanic acid *Phyo*
- B. Clarithromycin *O2 fluels*
- C. Cefazidime *Gram - 3rd line Cephs*
- D. Cefuroxime *2nd*
- E. Flucloxacillin *fluoropobne - antipseudomel*

40. A 43 year old man presents with 8 week history of symmetrical joint pain and swelling involving the metacarpal-phalangeal (MCP) metatarsal - phalangeal (MTP) and proximal interphalangeal (PIP) joints. Symptoms are worse in the morning and last for 1 hour. Which one of the following statements is TRUE of this condition?

- A. Non-steroidal anti-inflammatory drugs (NSAIDs) are the first line of therapy
- B. Extra-articular manifestations is not a feature
- C. Radiological investigation is required for the diagnosis of disease
- D. Disease modifying therapy should be instituted immediately
- E. Biologic agents have no role in its management *f Inflamm, IL-6*

41. In a 60 year old man with multiple myeloma and a fracture of the right femur, which one of the following is the MOST appropriate approach to management?

- A. Start melphalan and radiotherapy
- B. Start melphalan then refer for bone marrow transplantation
- C. Start analgesics, internally fix the fracture then administer radiotherapy
- D. Administer radiotherapy then internally fix the fracture
- E. Start neoadjuvant thalidomide then internally fix the fracture.

Page 9 of 20
Oral, putrefact, defect no scden on cr
BJ prater
to urine
serum

messy
polycho-

42. Which one of the following disease process is well matched with the renal manifestation?

- A. Syphilis - obstructive uropathy ^{nephro-syphilis}
- B. *Plasmodium malariae* infection - nephrotic syndrome ^{renal failure}
- C. Systemic lupus erythematosus - acute tubular necrosis ^{lupus nephritis}
- D. *Schistosoma haematobium* infection - Fanconi syndrome, obstructive ^{obstructive}
- E. Rheumatoid arthritis - acute glomerulonephritis ^{CSF on test}

43. A 46 year old man with diabetes presents with right foot ulceration without gangrene. It is septic with malodorous smell. HbA_{1c} is 8.5%. dorsalis pedis pulses are good. *Staphylococcus aureus* and *Klebsiella sp.* have been isolated from the wound swab. The following actions are appropriate EXCEPT:-

- A. Daily hydrogen peroxide soaks ^{DM ulcers}
 - B. Intravenous antibiotics ^{spread to}
 - C. Daily saline soaks ^{stop dressing}
 - D. Platelet - derived growth factor dressing ^{pathogenic control}
 - E. Insulin therapy ^{don't go bare foot}
- Impact foot daily*

44. A 65 year old man with 25 pack years of smoking presents with cough, weight loss and breathlessness. A chest radiograph shows a right apical homogeneous round opacity. All of the following findings are known to be associated with this presentation EXCEPT:-

- A. Hyperpigmentation of the palms ^{Paraneoplastic}
- B. Radicular pain to the right hand - Anorexia ^{from the mets}
- C. Hypocalcemia ^{hypercalc}
- D. Hoarseness of the voice ^{from the mets}
- E. Haemoptysis ^{from the mets}

45. A patient presenting with non-ST elevation acute coronary syndrome will benefit from all of the following therapeutic interventions EXCEPT:-

- A. Thrombolysis
- B. Combined clopidogrel and aspirin therapy
- C. Enoxaparin therapy
- D. Beta-blocker therapy
- E. Nitrates

46. A 70 year old man presents with generalized pruritus and weight loss. Clinical examination reveals green jaundice and a palpable (non-tender) gall bladder. Which of the conditions listed below is the MOST likely diagnosis?

- A. Acute cholecystitis
- B. Cholelithiasis
- C. Hepatocellular carcinoma
- D. Pancreatic malignancy
- E. Cholangiocarcinoma

47. A 20 year old patient presents with pruritic lesions on the neck, antecubital and popliteal fossae since 2 year of age. The lesions are lichenified, excoriated and crusted patches. The MOST likely diagnosis is:-
- A. Atopic dermatitis *Infants 3-6 mths - face, trunk, extensor surfaces*
 B. Seborrhoeic dermatitis
 C. Allergic contact dermatitis *Children - Antecubital & Popliteal fossae*
 D. Nummular dermatitis *Adults - face, neck, upper chest*
 E. Dyshidrotic dermatitis
48. In a HIV positive patient with cryptococcal meningitis and CD4 count of 40 cells/uL, which one of the following approaches would be the MOST appropriate?
- A. Amphotericin B plus fluconazole for 2 weeks, serial lumbar punctures and HAART initiation at 2 weeks
 B. HAART and amphotericin B plus fluconazole initiation simultaneously, serial lumbar punctures
 C. HAART for 2 weeks followed by amphotericin B plus fluconazole, serial lumbar punctures.
 D. Amphotericin B plus fluconazole for 2 weeks, serial lumbar punctures; then fluconazole. HAART initiation after 5 weeks
 E. HAART for 5 weeks; serial lumbar punctures. Initiation of amphotericin B plus fluconazole after 5 weeks.
49. A 40 year old alcoholic goes to bed and wakes up in the morning with a wrist drop. The MOST likely nerve injury is?
- A. Radial nerve
 B. Ulnar nerve
 C. Musculocutaneous nerve
 D. Median nerve
 E. Axillary nerve
50. A 28 year old man presents with pain and swelling of his left leg 3 days after a thorn prick. Which one of the following antibiotics is the BEST empiric choice?
- A. Ciprofloxacin
 B. Clarithromycin
 C. Metronidazole
 D. Amoxicillin - clavulanic acid
 E. Nitrofurantoin
51. All of the following statements are true regarding gout EXCEPT:-
- A. The 1st metatarsal-phalangeal joint is commonly involved
 B. Renal failure is a known complication
 C. It can present with extra-articular manifestations
 D. It is common in pre-menopausal women
 E. It results from monourate sodium deposition

52. Which one of the following is TRUE regarding chronic myeloid leukemia (CML)?
- A. It is almost exclusively a disease of children
 - B. Leucocyte alkaline phosphatase (LAP) score is reduced
 - C. Lymphadenopathy is common in the stable state
 - D. Autosplenectomy occurs ✓
 - E. Spontaneous fractures tend to occur
53. Which one of the following conditions is associated with dilutional hyponatraemia?
- A. Congestive heart failure
 - B. Acute tubular necrosis
 - C. Gastroenteritis ✓
 - D. Hypothyroidism
 - E. Hypercholesterolaemia
54. A 36 year old man with longstanding bronchial asthma has been on prednisolone 30mg/day for several years. Now he has cushingoid features. The other findings expected in this patient include all of the following EXCEPT:-
- A. Systemic hypertension
 - B. Bone pains
 - C. ✓ Normal libido
 - D. Agitated behaviour
 - E. Raised intra-ocular pressures
55. All of the following are danger signs in status asthmaticus EXCEPT:-
- A. ✓ Pulse rate of 115 beats/min
 - B. ✓ Inability to complete sentences
 - C. ✓ Respiratory rate of 36 breaths/min
 - D. ✗ Inability to perform peak flow measurements [250]
 - E. ✓ Blood pressure of 90/60 mm Hg
- Handwritten notes for Q55:
 → silent chest
 → resp effort
 → abnormal ↓ BP
 > 25 bpm
 BP 90/60 mmHg
56. All of the following pharmacotherapies have been shown to prolong survival in patients with non-valvular heart failure EXCEPT:-
- A. Spironolactone
 - B. Carvedilol β-blocker
 - C. Angiotensin converting enzyme inhibitors (ACE I)
 - D. Angiotensin receptor blockers (ARB)
 - E. Loop diuretics
57. A 35 year old man presents with heartburn and a feeling of regurgitation after meals. He frequently clears his throat while talking. Upper gastrointestinal tract (GIT) endoscopy is reported as normal. This condition is associated with all of the following features EXCEPT:-
- A. Poor quality of life
 - B. Increased incidence of malignancy
 - C. Barrett's oesophagus
 - D. Recurrent bronchospasm
 - E. Increased incidence of *Helicobacter pylori*

58. A 15 year old boy presents with insidious onset of pruritic eruption on the interdigital clefts, flexor aspects on the wrists and gluteal cleft. The lesions comprise of papules, vesicles, pustules and burrows. The MOST likely diagnosis is:-
- Larval migrans
 - Papular urticaria
 - Urticaria pigmentosa
 - Scabies
 - Dermatitis herpetiformis
59. A 34 year old HIV positive man presents with a 3 week history of severe headaches and photophobia. His CD₄ count is 36 cells / μ l. He further reports that 2 months back, he had similar headaches, was admitted and given 2 weeks of amphotericin B for confirmed "fungal meningitis". He did not go for follow-up after discharge. What is the MOST useful test to confirm the diagnosis now?
- Cerebrospinal (CSF) cryptococcal antigen (CRAG) test
 - Serum CRAG test
 - India ink in CSF
 - CSF fungal culture
 - CSF protein level
60. A 30 year old woman presents with a 2 week history of progressive weakness. She has found it difficult to rise from a sitting position and comb her hair. Examination reveals normal deep tendon reflexes and sensory modalities. All of the following statements are true regarding her illness EXCEPT:-
- It responds to steroids
 - It is associated with elevated muscle enzymes
 - It is associated with acetylcholine receptor antibodies
 - It is associated with malignancies
 - Dysphagia occurs
61. A 60 year old man presents with a 1 day history of headache, fever and neck stiffness. Which one of the following organisms is NOT likely to cause this presentation?
- Streptococcus pneumoniae*
 - Group A β -hemolytic *Streptococcus*
 - Haemophilus influenzae*
 - Neisseria meningitidis*
 - Listeria monocytogenes*
62. All of the following indicators are useful in evaluating the success of treatment of rheumatoid arthritis EXCEPT:-
- Tender joint count
 - Swollen joint count
 - Markers of inflammation
 - Number of deformed joints
 - Functional status of the patient

63. Steroid therapy is indicated in the following oncological emergencies EXCEPT:-
- A. Superior vena cava obstruction
 - B. Hypercalcemia
 - C. Severe neutropenic sepsis
 - D. Raised intracranial pressure
 - E. Spinal cord compression
64. A 35 year old man presents with nausea, vomiting and general malaise. He has been hypertensive for 5 years. Laboratory tests show:-
- Urinalysis – protein 3+, RBCs 2+, granular casts
 - Haemoglobin 9.3g/dl, MCV 80fl WBC $6 \times 10^9/L$, platelets $119 \times 10^9/L$
 - Serum K^+ 5.4 mmol/L, Na^+ 128 mmol/L urea 28mmol/L creatinine 837umol/L
 - Renal ultrasound – bilateral contracted kidneys Right = 6.2 x 3.8 cm, Left = 6.32 x 3.3 cm
- Which of the following statements is TRUE?
- A. This is acute kidney injury secondary to volume depletion
 - B. This is acute glomerulonephritis
 - C. Renal biopsy should be performed
 - D. Patient requires longterm dialysis
 - E. Patient has hypertensive glomerulosclerosis
65. All of the following are rational combinations of oral glucose lowering medications EXCEPT:-
- A. Metformin/Acarbose/Glimepiride
 - B. Metformin/Repaglinide/Linagliptin
 - C. Metformin/Insulin
 - D. Chlorpropamide/Insulin
 - E. Metformin/Linagliptin/Insulin
66. A 60 year old male has a 20 pack-year history of cigarette smoking. He presents with a productive cough and shortness of breath especially on cold days and associated chest tightness and wheezing. The MOST likely diagnosis is:-
- A. Asthma
 - B. Chronic obstructive pulmonary disease (COPD)
 - C. Heart failure
 - D. Anxiety attack
 - E. Pneumonia
67. An elderly female who is being nursed in hospital for dense hemiplegia from a cerebrovascular accident is suddenly diaphoretic and dyspnoeic. On examination, she is cold, sweaty and tachypnoeic. Her radial pulse is weak and feeble. The electrocardiogram (ECG) is significant only for sinus tachycardia. All of the following investigations are useful in establishing the diagnosis EXCEPT:-
- A. Cardiac troponin assay
 - B. D-dimer assay
 - C. Computerized tomography (CT)-pulmonary angiography
 - D. Blood sugar analysis
 - E. Chest radiograph

68. All of the following statements regarding irritable bowel syndrome (IBS) are true EXCEPT:-
- A. Presents with increased loose watery stools
 - B. Diarrhoea often occurs at night
 - C. The stool never contains blood
 - D. Constipation is sometimes the predominant symptom
 - E. Abdominal pain is often relieved by defecation
69. AIDS-defining mucocutaneous disorders include all of the following EXCEPT:-
- A. Oesophageal candidiasis
 - B. Kaposi's sarcoma
 - C. Cutaneous cryptococcosis
 - D. *Herpes simplex* ulcers
 - E. Pyoderma gangrenosum
70. A 26 year old woman presents with a 2 week history of change in speech and a tongue that deviates to the right side on protrusion. Which cranial nerve is involved?
- A. Right glossopharyngeal
 - B. Left glossopharyngeal
 - C. Right hypoglossal
 - D. Left hypoglossal
 - E. Left vagus
71. A 26 year old woman presents with history of chronic cough. She reports that she was on treatment for tuberculosis which she stopped 3 weeks prior after having taken it for 25 days. Which one of the following is NOT appropriate in the approach to her management?
- A. Restart anti-tuberculous treatment with rifampicin, isoniazid, pyrazinamide and ethambutol
 - B. Restart anti-tuberculous treatment with rifampicin, isoniazid, pyrazinamide, ethambutol and streptomycin
 - C. Send sputum for acid fast bacilli staining
 - D. Send sputum for genexpert MTB/RIF
 - E. Apply directly observed therapy
72. A 13 year old boy presents with a 2 day history of fever, right knee pain and swelling. There were no precipitants to this illness. Which one of the following statements is TRUE regarding this condition?
- A. Intra-articular steroids are useful in the management
 - B. Analgesia, oral antibiotics and bedrest is the gold standard in the management
 - C. Antibiotics should be withheld until results of the gram stain are obtained
 - D. Intra-articular antibiotics are useful
 - E. Needle aspiration and drainage of the joint is warranted


73. A middle-aged man is reviewed in the outpatient clinic with complaints of abdominal swelling for several weeks. Physical examination reveals splenomegaly extending 10 cm below the costal margin. All of the following are likely causes EXCEPT:-
- A. Chronic myeloid leukemia
 - B. Miliary tuberculosis
 - C. Myelofibrosis
 - D. Visceral leishmaniasis
 - E. Hyper-reactive malarial splenomegaly (HMS)
74. - Which one of the following statements is TRUE concerning urinary tract infections?
- A. *Staphylococcus aureus* is the commonest organism among sicklers
 - B. *Proteus spp.* infection is associated with calculi
 - C. Treatment of *Candida* infections predisposes one to bacterial infections
 - D. Haematogenous route of infection is the commonest origin
 - E. In men, infections are usually associated with sexual intercourse
75. All of the following are established risk factors for diabetic foot ulcer disease EXCEPT:-
- A. Diabetic cardiomyopathy
 - B. Chronic kidney disease stage 3 and higher
 - C. Macular eye disease
 - D. Peripheral neuropathy
 - E. Claw-toe deformity
76. Which one of the following is NOT a recognized risk factor for the development of deep venous thrombosis?
- A. Hormonal contraceptive therapy
 - B. Protein C deficiency
 - C. Heart failure
 - D. Anti-phospholipid syndrome
 - E. Hypertension
77. Which of the following is NOT a cause of constipation?
- A. Hypocalcemia
 - B. Hypothyroidism
 - C. Aluminium containing antacids
 - D. Cerebrovascular accidents
 - E. Atorvastatin
78. All of the following are risk factors for haemorrhagic stroke EXCEPT:-
- A. Cocaine use
 - B. Cigarette smoking
 - C. Amyloid angiopathy
 - D. Aneurysm
 - E. Warfarin use

79. A tourist suffered a bout of watery diarrhoea which became mucoid and blood stained. He had fever and developed severe joint pains a few weeks later. Rheumatoid factor was negative. All of the following statements are true regarding the disease EXCEPT:-
- A. *Shigella flexneri* is the causative organism
 - B. There is high circulating bacterial antigen
 - C. Culture of *Neisseria gonorrhoea* will be obtained from joint aspirate
 - D. It is associated with HLA B27 genotype
 - E. It is associated with serum leucocytosis
80. A 45 year old woman with a diagnosis of rheumatoid arthritis has been on methotrexate and prednisone for 2 years. Which one of the following complications is NOT likely to be due to her chronic steroid use?
- A. Cataract formation
 - B. Peptic ulcer disease
 - C. Diabetes mellitus
 - D. Liver disease
 - E. Hypertension
81. A strict vegetarian presents with general malaise, exertional dyspnoea and pallor. Peripheral blood film shows segmented neutrophils and the mean corpuscular volume (MCV) is 110fl. Which one of the following statements is TRUE?
- A. Gum hypertrophy occurs
 - B. Serum ferritin levels are low
 - C. Bone marrow Prussian blue stain is negative
 - D. Paraesthesias are common
 - E. Condition is invariably fatal
82. A 30 year old man has just been diagnosed with HIV. He presents to the clinic with complaints of unintentional weight loss despite a good appetite. His initial weight was 70Kg. He has lost 8 Kg over the past 3 months. Physical exam reveals generalized lymphadenopathy. What is his current WHO stage?
- A. Stage 0
 - B. Stage 1
 - C. Stage 2
 - D. Stage 3
 - E. Stage 4
83. A 28 year old woman presents with goitre. Thyroid profile showed TSH = 0.000m IU/L, FT4 = 30ng/L, FT3 = 12 pmoL/L. Ultrasound showed a thyroid nodule in the right lobe, the rest had normal echodensity. Which of the following treatments is LEAST appropriate for her?
- A. Propranolol
 - B. Propylthiouracil
 - C. Lugol's iodine
 - D. Methylprednisolone
 - E. Surgery

84. Which of the following conditions is NOT a recognized cause of cardiogenic syncope?
- A. Pulmonary embolism
 - B. Ventricular fibrillation
 - C. Postural hypotension
 - D. First degree heart block
 - E. Third degree heart block
85. A 45 year old man with liver cirrhosis and bleeding tendencies and an otherwise normal blood count comes to you for management. Which of the following is the MOST appropriate therapy?
- A. Tranexamic acid
 - B. Platelet infusion
 - C. Whole blood transfusion
 - D. Transfusion of packed cells
 - E. Vitamin K
86. Which of the following drugs is LEAST useful in myoclonic epilepsy?
- A. Ethosuximide
 - B. Carbamazepine
 - C. Sodium valproate
 - D. Clonazepam
 - E. Lamotrigine
87. Modifiable risk factors for osteoarthritis include all of the following EXCEPT:-
- A. Age
 - B. Race
 - C. Female gender
 - D. Obesity
 - E. Prior inflammatory joint disease
88. Which one of the following is NOT a risk factor for hepatocellular carcinoma?
- A. Heavy alcohol consumption
 - B. Exposure to aflatoxins
 - C. Hepatitis A virus
 - D. Hepatitis B virus
 - E. Hepatitis C virus
89. Which one of the following statements is TRUE regarding diabetic nephropathy?
- A. Stage 2 is characterized by microalbuminuria
 - B. Hyperfiltration is only evident in late stages
 - C. The microalbuminuria stage is potentially reversible
 - D. Microalbuminuria precedes the glomerular structural changes
 - E. Stage 4 patients need to be started on dialysis

90. All of the following are evidence – based therapeutic lifestyle changes in the control of systemic arterial hypertension EXCEPT:-
- A. Moderation of alcohol ingestion
 - B. Reduced dietary salt ingestion
 - C. Lower dietary potassium intake
 - D. Stress management
 - E. Regular aerobic exercise
91. A 30 year old pregnant woman is found to be hepatitis B surface antigen (HBs Ag) positive. She is concerned about transmitting the virus to her unborn infant. Which of the following factors is MOST useful in determining the risk of transmission?
- A. Hepatitis B e antigen (HBeAg) status
 - B. Hepatitis B core immunoglobulin G (HBcIgG) status
 - C. Alanine aminotransferase (ALT) 23IU/L
 - D. Her alcohol history
 - E. Aspartate aminotransferase (AST)/ALT ratio >2
92. A 38 year old woman presents with a 1 month history of bilateral numbness of the lower limbs. Examination is notable for reduced vibration sense and reduced ankle reflexes. All of the following tests are useful in this patient EXCEPT:-
- A. Serum sodium
 - B. Serum creatinine
 - C. Thyroid stimulating hormone
 - D. Glycosylated haemoglobin
 - E. Haemoglobin level
93. A 25 year old woman presents with gradual skin tightening involving the hands and face. She also has first degree heart block on the ECG and reflux oesophagitis. Which one of the following statements is TRUE regarding this condition?
- A. It is commoner in males compared to females
 - B. It is easily amenable to treatment
 - C. Raynaud's phenomenon is an invariable feature
 - D. It has no renal manifestations
 - E. It is usually an indolent disease
94. A 16 year old girl has bilateral haemarthrosis of elbow joints. She has a fluctuant right knee that is tender. She is bleed from a venepuncture site for the past 24 hours. Which one of the following is the MOST likely diagnosis?
- A. Classical hemophilia
 - B. Christmas disease
 - C. Von Willebrand's disease
 - D. Disseminated intravascular coagulopathy (DIC)
 - E. Protein C deficiency
95. All of the following are features of minimal change glomerulonephritis EXCEPT:-
- A. Heavy proteinuria
 - B. Hypertension
 - C. Corticosteroid responsiveness
 - D. Lack of active sediment in urine
 - E. Hypercholesterolemia

96. A 20 year old woman presents with a history of sudden onset of confusion. This is followed by a severe episode of generalized tonic-clonic seizure. Before the onset of the seizure, she had reported a funny smell. Examination reveals a temperature of 38°C , confusional state with no evidence of meningeal irritation. Which of the following would be the MOST effective treatment in this condition?
- Acyclovir
 - Gancyclovir
 - Anti-tuberculous treatment
 - High dose steroids
 - Ceftriaxone with vancomycin
97. Low voltages on a 12-lead ECG occur in all the following conditions EXCEPT:-
- Amyloid heart
 - Chronic obstructive pulmonary disease (COPD)
 - Pericarditis
 - Obesity
 - Pericardial effusion
98. A 22 year old man presents with a 6-month history of left upper quadrant discomfort and early satiety. 2 days prior to presentation, he developed priapism. Abdominal exam revealed splenomegaly 12 cm below left costal margin. White blood cell count (WBC) is $279 \times 10^9/\text{L}$, haemoglobin is 9.4 g/dL and platelets $702 \times 10^9/\text{L}$. What is the MOST appropriate next investigation to confirm the diagnosis?
- Abdominal ultrasound scan
 - Erythropoietin level
 - Haemoglobin electrophoresis
 - Bone marrow evaluation
 - Peripheral blood film
99. Which one of the following statements is TRUE regarding ascites in liver disease?
- Thiazides are the diuretics of choice
 - Malignant ascites responds well to diuretic therapy
 - Portal hypertension is a rare cause
 - Aldosterone antagonists are the preferred diuretics
 - Infectious aetiology is uncommon
100. A 20 year old woman at 20 weeks gestation presents to the emergency department with dyspnoea class III. On examination, she has a regular pulse rate of 90 beats/min, a non-displaced apex with apical mid-diastolic rumbling murmur with loud first heart sound. Which of the following is the MOST appropriate emergency therapeutic intervention?
- Furosemide therapy
 - Termination of pregnancy
 - Digoxin therapy
 - Angiotensin converting enzyme inhibitor (ACEI) therapy
 - Beta blocker therapy

10 MED *  Toise Baraka!!

UNIVERSITY OF NAIROBI

UNIVERSITY EXAMINATIONS 2012/2013 68

FIFTH YEAR EXAMINATIONS FOR THE DEGREE OF BACHELOR OF
MEDICINE AND BACHELOR OF SURGERY

HME 500: MEDICINE - MCQ

DATE: NOVEMBER 7, 2013

TIME: 9.00 A.M. - 12.00 NOON

INSTRUCTIONS:

1. There are 100 Questions in this Question paper. Ensure that your paper has all the questions.
2. An answer sheet is provided where all your answers should be appropriately marked as per instructions.
3. There is no negative marking for incorrect responses.
4. No mark will be given if more than one answer is marked in a single question
5. Write your index number on the answer sheet provided
6. The examination paper should be left in the examination room.

EXAMPLE ON CORRECT USE OF THE ANSWER SHEET:

61. Which of the following is NOT appropriate while referring to someone of male gender?
- (a) Boy
 - (b) Lad
 - (c) Mistress (correct answer)
 - (d) He
 - (e) Master

ANSWER SHEET - MARKING

NO	A	B	C	D	E
60					
61			X		
62					

*1 The following are matched correctly except:-

- (a) Painless chancre ✓ - Treponema Pallidum ✓
 - (b) Painful chancre ✓ - Haemophilus ducreyi ✓ (Chancroid)
 - (c) Grouped vesicles ✓ - Herpes simplex virus ✓
 - (d) Inguinal Lymphadenopathy - Chlamydia trachomatis ✓
 - (e) Urethral discharge ✓ - Mycoplasma hominis ✓
- Primary Syphilis*
Lymphogranuloma venereum
Non gonococcal urethritis

2. A 20 yr old previously healthy man presents with a 2 day history of chest pain, cough productive of rusty sputum and fever. Which one of the following is least appropriate for his treatment?

- (a) Amoxicillin/clavulanic acid ✓ - *β-lactamase inhibitor*
 - (b) Doxycycline ✓ - *Tetracycline antibiotic → treat pneumonia & upper respiratory infection*
 - (c) Azithromycin ✓ - *cephalosporin 3rd generation*
 - (d) Ciprofloxacin ✓ - *fluroquinolone*
 - (e) Cefuroxime ✓ - *cephalosporin*
- Community Acquired Pneumonia*
Macrolides
Tetracycline
Cephalosporins

3. A 64 year old man with diabetes mellitus presents with swelling and pain of his left foot. On examination, the foot is found to be swollen, warm, tender with athlete's foot. Which one of the following is most appropriate for his treatment?

- (a) Cloxacillin ✓
 - (b) Ciprofloxacin
 - (c) Amoxicillin/clavulanic acid ✓
 - (d) Benzyl penicillin ✓
 - (e) Clindamycin ✓
- Cellulitis*
Amoxicillin

4. An 18 year old female known to have rheumatic heart disease presents with chest pain and worsening heart failure. On examination she is found to have a new aortic regurgitation murmur and mild splenomegaly. Which one of the following is an appropriate empiric choice of treatment for her?

- (a) Crystalline penicillin only ✓
- (b) Ampicillin and levofloxacin
- (c) Ampicillin and gentamicin ✓
- (d) Ceftriaxone only ✓
- (e) Ampicillin, gentamicin and vancomycin ✓

Aortic - Staphylococcus aureus
gentamicin
Splenomegaly - Bacterial
MRSA → Vanco + rifampin + gentamicin
Bacterial endocarditis:-
P + gentamicin
Page 1 of 22
Staph :- Vancomycin + gentamicin
13 rem

amino glycoside
macrolide / glycopeptide
macrolide

5. A 40 year old female currently on treatment with a course of clindamycin develops profuse diarrhoea. Which one of the following is an appropriate choice of antibiotic for her treatment? - *Pseudomonas aeruginosa* (C. difficile associated diarrhoea)

- (a) Oral ciprofloxacin ✓
- (b) Oral Metronidazole ✓ *clindamycin diarrhea*
- (c) Oral sulfamethoxazole trimethoprim ✓
- (d) Continue oral clindamycin ✓
- (e) Oral amoxicillin ✓

Rx: 5 metronidazole or vancomycin

6. Which one of the following is not essential in the diagnosis of severe sepsis?

- (a) Blood pressure < 90/60 mmHg ✓
- (b) Creatinine > 130 mmol/ml ✓
- (c) Severe dehydration ✓ *→ +ve fluid balance (substantial edema)*
- (d) INR greater than normal ✓ *→ liver failure (caused)*
- (e) Confusion or delirium ✓

1) MAF
2) RR
3) WBC

7. A 36 year old HIV positive female with a CD4 of 50 cells/μL presents with a one month history of severe headache and a positive CSF CRAG. All of the following are indicated in her treatment except:

- (a) Amphotericin B and Fluconazole ✓
- (b) Amphotericin B and Flucytosine ✓
- (c) Amphotericin B and Dexamethasone ✓
- (d) High dose Fluconazole ✓
- (e) High dose Fluconazole and Flucytosine ✓

antibiotic aminoglycosides

8. A patient presents to the Accident and Emergency department with diplopia. Which of the following is inconsistent with a diagnosis of right 3rd cranial nerve palsy?

- (a) Inability to fully adduct the right eye ✓
- (b) Dilated right pupil ✓
- (c) Inability to fully abduct the right eye ✓ *Abducens*
- (d) Right ptosis ✓
- (e) Right eye resting in 'down and out' position ✓

1) P 703/2
2) M 4/20/17
3) 2/1/17

double vision

9. Following an infarctive stroke, all the following medications are indicated alone or in combination, except:

- (a) Aspirin ✓
- (b) Clopidogrel ✓
- (c) Atrovastatin ✓
- (d) Warfarin ✓
- (e) Nimodipine ✓

haemorrhagic stroke → interaction

10. What finding in a patient with facial muscle weakness suggests a diagnosis OTHER than Bell's palsy? → LMN

- (a) Sparing of frontalis muscle ✓ - eg. stroke
- (b) Altered taste sensation ✓
- (c) History of preceding respiratory infection - assoc. of URTI eg. mumps.
- (d) Unilateral involvement ✓
- (e) Altered hearing on affected side & sensitivity to sound.

11. Regarding lumbar punctures, which is TRUE?

- (a) In viral meningitis, the CSF glucose is always normal ✓
- (b) In tuberculosis meningitis, the CSF protein is usually high ✓ - ↑ protein with ↓ in most cases
- (c) In listeria meningitis, the CSF protein is usually normal & elevated.
- (d) In bacterial meningitis, the CSF glucose is usually normal & decreased.
- (e) In sub-arachnoid hemorrhage, the CSF colour does not change ✓

12. All the following are features of pellagra EXCEPT:

- (a) Dementia ✓ [Niacin B3]
 - (b) Macrocytosis ✓
 - (c) Diarrhoea ✓
 - (d) Depression ✓
 - (e) Hyperpigmentation ✓
- 4Ds - Diarrhoea
- Dermatitis
- Dementia
- Death

13. Which of the following is matched correctly in relation to deficiency and the resulting disorder?

- (a) Iron deficiency - Brittle bones ✓
 - (b) Iodine deficiency - Anxiety ✓
 - (c) Fluoride deficiency - dysphagia ✓
 - (d) Zinc deficiency - Reduced immunity ✓
 - (e) Calcium deficiency - Goitre ✓
- Calcium
Goitre
Osteoporosis
Brittle bones

14. Indications for targeted viral load testing according to the Kenya National ART guidelines include all of the following EXCEPT:

- (a) CD4 counts lower than 100 after 12 months on ART ✓
 - (b) Fall of CD4 count to or below pre-ART level ✓
 - (c) Fall of CD4 count by 30% or more from on-treatment peak value ✓
 - (d) Pruritic papular eruptions after 6 months on ART ✓
 - (e) Recurrent WHO Stage 2 illness after 6 months on ART ✓
- HIV
6, 12 ever

III OR IV

22/15

Juma is admitted in the medical ward with a diagnosis of pulmonary TB and further tests reveal that he is HBsAg positive and has an elevated alanine aminotransferase (ALT). What regimen of ART would you prescribe for Juma?

- (a) Abacavir + lamivudine + nevirapine
- (b) Tenofovir + lamivudine + efavirenz *1st line regimen*
- (c) Tenofovir + lamivudine + nevirapine
- (d) Zidovudine + lamivudine + efavirenz
- (e) Zidovudine + lamivudine + nevirapine *hepatotoxic*

16

John, 25 years, has just been diagnosed with HIV. He presented to the clinic with complaints of unintentional weight loss despite a good appetite. His initial weight was 63 kg and has lost 7 kg over the past two months. Physical examination reveals generalised lymphadenopathy and an old post-herpetic scar. What is his current WHO stage?

- (a) Stage 0
- (b) Stage 1
- (c) Stage 2
- (d) Stage 3
- (e) Stage 4

$\frac{7}{63} \times 100 = 11.1 < 10 \therefore \text{Stage 3}$

17

Josephine presents with a 2 week history of headache and fever. She developed convulsions 3 days ago. Significant medical history includes a diagnosis of HIV infection 2 months ago with a baseline CD4 count of 169 cells/ μ L. She has not yet commenced ART. Examination reveals left-sided hemiplegia. The most likely diagnosis is:-

- (a) Bacterial meningitis
- (b) Cryptococcal meningitis $\times 100$
- (c) Progressive multifocal leucoencephalopathy (PML)
- (d) Primary brain lymphoma
- (e) Toxoplasmosis $\times 200$

18

A 45 year old man presents with chronic watery diarrhea and weight loss. Factors that would lead to a diagnosis of Crohn's disease include all the following except:

- (a) A vague mass in the right iliac fossa
- (b) 'Skip' ulcerated lesion of the gut mucosa
- (c) Fistulae of the gut
- (d) Anorectal fissure
- (e) Associated blood stained stools

Right iliac fossa swelling \Rightarrow
 appendicitis, lymphoma, carcinoma, ileocolic abscess

Anaemia
 Pyoderma gangrenosum
 Erythema nodosum
 10

ulcerative colitis
 Spontaneous
 In Crohn's colitis but less common
 Crohn's but more common
 Ulcerative colitis

9152
Pancreas

119 A 35 year old known alcoholic presents with sudden onset of abdominal pain mainly in the epigastrium. Clinical examination reveals no rebound tenderness and the serum amylase is 500 IU/ml. Which of the following is not indicated in the immediate management of this man?

- (a) Intravenous fluids ✓
- (b) Antibiotics ✓ *imipenem*
- (c) Proton pump inhibitor ✓
- ~~(d) Oral feeding~~ *NG NPO*
- (e) Abdominal CT scan evaluation ✓

Delay Sx 2 weeks if possible

Analgesics

Done 6-10 days after admission & use to define viability of pancreas

120 A 30 year old obese man presents with burning retrosternal chest pain associated with hoarseness of voice. Both the electrocardiogram and serum troponin levels are normal. Upper GIT endoscopy is also normal. Which of the following is not indicated in the management of this condition?

- (a) 24 hour pH monitoring ✓
- (b) Esomeprazole ✓
- (c) Weight reduction ✓
- ~~(d) Cardiac catheterisation~~
- (e) Oesophageal manometry ✓

is sepsis, organ failure or clinical deterioration.

21 A patient presents with haematemesis which is later confirmed at endoscopy to be originating from bleeding oesophageal varices. Which of the treatments below is not indicated in his immediate management?

- (a) Normal saline infusion ✓
- (b) Band ligation ✓
- (c) Sandostatin infusion ✓ *occlude*
- (d) Propranolol ✓
- ~~(e) Porto caval shunting~~

used in severe bleeds & where other rx fails

22 The following are recommended in the management of acute liver failure except:

- (a) Mannitol ✓
- (b) Dextrose ✓
- (c) Vitamin K ✓
- ~~(d) Diazepam~~
- (e) Fresh frozen plasma ✓

Avoid CNS depressants

Diuretics



123. The following Hepatitis B serologic profile is found in an asymptomatic 40 year old male:

HB_sAg Positive ✓ By symptoms
 anti-HB_s Negative
 IgG anti HBC Positive ✓ previous (or now!)
 IgM anti HBC Negative
 HB_eAg Positive ✓ viral replication + re-infection
 Anti-HB_e Negative (viral replication and infection)

ve in
 in
 inactive

Which of the following is the best interpretation of this profile?

- (a) Past Hepatitis B infection *
- (b) Acute Hepatitis B *
- (c) Inactive HBV carrier *
- (d) Chronic Hepatitis B ✓
- (e) Hepatitis B vaccination *

Chronic active hepatitis

x 1.3.2 x

124. A 43 year old with a 10 year History of ulcerative colitis presents for annual follow up health examination. Which of the following Test is least useful?

- (a) Serum Alkaline phosphatase (ALP) ✓ PSC
- (b) Colonoscopy ✓
- (c) Complete blood count ✓
- (d) OGD ✓ ✓ → append small to colon
- (e) Serum Gamma glutamyl /transferase (GGT) and Alanine transferase (ALT) ✓ → primary sclerosing cholangitis

Which of the following statements regarding Helicobacter pylori is true?

- (a) It is associated with a large proportion of duodenal ulcers *
- (b) It invades Gastric mucosa and rarely causes systemic infections ✓
- (c) It colonizes surface epithelial cells in the antrum of the stomach ✓
- (d) It causes a decrease in antral G-cells * D somatostatin production ↓
- (e) It increase the risk of GERD *

antral predominant gastritis → DU
 pyloric predominant gastritis → gastric cancer

20. Six months after a diagnosis of GERD a patient presents with intermittent difficulty in swallowing solid food without odynophagia, weight loss or vomiting. Which one of the following is the most likely cause of the dysphagia?

- (a) Achalasia ✓
- (b) Esophageal stricture ✓ pain
- (c) Esophageal cancer *
- (d) Barrett's esophagus *
- (e) Hiatus Hernia ✓

odynophagia → a condition in which pain occurs when food is swallowed

Schatz ring
 proximal oesophageal web
 OES
 motility

0703107061 → Bishop ASKofm

Meds cap

27

The following are known to cause focal segmental colomerulos decrease FSGS-except:

- (a) Intravenous Heroin use ✓
- (b) HIV disease ✓ - HIV associated nephropathy =
- (c) Hepatitis C Virus infection ✓ - hepatitis B
- (d) Lymphoma ✓
- (e) Massive obesity ✓

asymptomatic protein
concomitant with histop

1° FSGS -
Drugs
- IV heroin
- analgesics
- Uremia
- Anabolic s

28

Factors in the pathogenesis of Malaria Associated Acute Kidney Injury include the following except:

- (a) Haemolysis ✓
- (b) Disseminated intravascular coagulation ✓
- (c) Rhabdomyolysis ✓ - breakdown of tissue that leads to be release of muscle fibre content into the blood
- (d) Microangiopathic Hemolytic Anemia (MAHA) ✓
- (e) Shock ✓ - rigid shock

2°
- lymphoma
- HIV, hep
- parvovirus
- hemoglobin
- Obesity

trauma
Compartment
new
syndrome
Plasmodium
causes
nervous +
schistosomiasis
causes in trop, sub

29

Indices that mitigates against the probability of minimal change Nephrotic Syndrome include all below except:

- (a) Dialysis patient in the family of the patient ✓
- (b) Global renal dysfunction ✓
- (c) Elderly patient ✓
- (d) Urine concentration defects ✓
- (e) Selective proteinuria ✓

- C
- corticosteroid response
- selective proteinuria

30

The following are adverse effects of blood transfusion except:

- (a) Iron overload ✓
- (b) Polycythemia Vera ✓
- (c) Transmission of Hepatitis C virus infection ✓
- (d) Transfusion induced lymphocyte suppression ✓
- (e) Allosensitization ✓

hem siderosis

B, HIV, malaria

31

Which one of the following statement is true concerning the stages of diabetic nephropathy?

- (a) Glomerular Basement Membrane (GBM) thickening occurs in stage I ✓
- (b) Stage 2 is characterised by microalbuminuria ✓ - stage III
- (c) Stage 3 is quiescent ✓ - incipient
- (d) Stage 4 disease has reduced glomerular filtration rate (GFR) ✓ - stage 5
- (e) Macroproteinuria is present in Stage 3 ✓ - stage II

DIABETIC NEPHROPATHY

- I - Hyperfiltration GFR > 120 ml/min
- II - GFR normal thickening (0.4µm) GBM
- III - ↓ GFR < 80 microalbuminuria 10-14
- IV - nephrotic range proteinuria after 14 yrs
- V - End-stage 16 yrs

A. S. S. S. S. S.

32. Which one of the following statements is false concerning urinary tract infections?

- (a) Female are more predisposed ✓ *↓ host up/ma (P. aeruginosa to (a))*
- (b) E coli is the commonest organism isolated ✓
- (c) Haematogenous spread is a commoner route of acquisition ✓
- (d) Isolation of Proteus species may indicate presence of renal calculi ✓
- (e) Infections in males are more commonly associated with urinary tract structural abnormalities than in women ✓

33. A 69 year old man with anemia, spastic paraplegia, and lytic lesions on skull x-rays is found to have a serum Creatinine of 389 μmol/L. All the following are possible causes of renal failure in him except

- (a) Bladder outlet obstruction ✓ *AKI*
 - (b) Hypercalcaemia chronic ✓ *AKI*
 - (c) Paracetamol ingestion ✓ *AKI*
 - (d) Hyperuricaemia ✓ *AKI*
 - (e) Sepsis ✓ *MODS - AKI*
- AKI: Trauma, Rhabdomyolysis, Drugs, Sepsis, Hypotension, Heart failure, Urinary obstruction, Acute glomerulonephritis, Acute tubular necrosis*

34. Which of the following statements is true concerning preeclampsia?

- (a) The intravascular volume is usually contracted ✓
- (b) Hypertension should be initially managed with Beta-adrenergic blockers ✓ *Atorvastatin, memg, dsa*
- (c) Proteinuria usually persists for longer than 6 months post delivery ✓
- (d) Termination of pregnancy is mandatory ✓ *AKI*
- (e) Hypertatremia is commonly associated ✓

35. A patient with HIV/AIDS and CD4⁺ count of 10/mm³ presents with multiple painful pustular lesions on legs and arms which subsequently break down to form undermined ulcers with black base.

The most likely diagnosis is:

- (a) Bullous impetigo ✓
- (b) Kaposi's sarcoma ✓
- (c) Pyoderma gangrenosum ✓ *→ autoantibodies*
- (d) Furunculosis ✓
- (e) Cellulitis ✓

36. A 25 year old patient presents with scaly papules and plaques. Differential diagnoses include all the following except:

- (a) Psoriasis vulgaris ✓
- (b) Lichen planus ✓
- (c) Nummular dermatitis ✓
- (d) Pityriasis rosea ✓
- (e) Urticaria - *pimple-like* ✓ *↑ wheals*

37. Cutaneous lesions of lupus erythematosus include all the following forms except:

- (a) Malar erythema ✓
- (b) Psoriasiform ✓
- (c) Discoid ✓
- (d) Vasculitic ✓
- (e) Nodular prurigo-like ✗

38. A patient presents with generalized pruritic wheals. The face is diffusely swollen. The patient is cyanosed with laboured breathing. The priority intervention is:

- (a) Intravenous line ✓
- (b) Secure airway ✓
- (c) Nebulization ✓
- (d) Oxygen by mask ✓
- (e) Central venous pressure line ✓

anaphylaxis
Type I hypersensitivity reaction

39. A 22 year old, previously healthy, patient presents with serous fluid filled vesicles and bullae of three days duration. Nikolsky sign is positive. Erosion lesion surface area is 30%. Other prognosticators include all the following except??

Scorten

- (a) Pulse rate ✓ 120 *Dysrhythmic*
- (b) Serum urea ✓ 10 *Pemphigus vulgaris*
- (c) Haemoglobin ✓ 14 *and bullous pemphigoid*
- (d) Blood glucose ✓ 14 *absent sign*
- (e) Serum bicarbonate ✓ 20

Toxic epidermal necrolysis
↓
Rubbing skin results in exfoliation of the outermost layer, forming a blister within minutes. Almost always present in TEN

40. All the following are associated with photosensitivity except:

- (a) Dermatomyositis ✗
- (b) Pellagra ✓ 4D
- (c) Lupus erythematosus ✓ SOAP BRAIN MD
- (d) Porphyria cutanea tarda ✓
- (e) Enalapril induced cutaneous eruption ✓

Pellagra → goose skin
nicotinic acid

41. A 15 year old student presents with lichenified patches on the neck, antecubital and popliteal fossae. He has had remissions with topical steroids followed by relapses since early childhood. What is the most likely diagnosis?

- (a) Allergic contact dermatitis - ~~eczema~~
- (b) Irritant contact dermatitis
- (c) Seborrhoeic dermatitis - HIV
- (d) Atopic dermatitis ✓
- (e) Nummular dermatitis

eczema

42. Physical modalities used in the rehabilitation of patients with arthritis include the following except:

- (a) Electrical stimulation ✓
- (b) Hydrotherapy ✓
- (c) Exercise therapy ✓
- (d) Rest presumption ✓
- (e) Cognitive behaviour therapy

Handwritten notes:
 Cold/hot applications
 electrical stimulation
 hydrotherapy
 Rest & downtime
 Exercise

43. The following are true concerning septic arthritis except:

- (a) Pre-existing rheumatoid arthritis is a risk factor ✓
- (b) Staphylococcus aureus is the most common organism in prosthetic joint infections ✓
- (c) ~~Athrocentesis is contraindicated~~ ✓ *(Definitive dx only)*
- (d) Antibiotic treatment should begin immediately once proper samples for microbiologic studies have been collected ✓
- (e) Hemodialysis patients are predisposed to infections at axial skeleton sites ✓

44. The following medications are used in the treatment of acute attacks of gout arthritis except:

- (a) Non steroidal anti-inflammatory drugs (NSAIDs) ✓
- (b) Cortico steroids ✓
- (c) Colchicine ✓
- (d) ~~Allopurinol~~ ✓ *⇒ long term not acute*
- (e) Adrenocorticotrophic hormones (ACTH) ✓

Handwritten note: most are appendicular

45. The following are true concerning gout except:

- (a) The age of onset in women is older ✓ *post menopause*
- (b) ~~The majority of people with hyperuricaemia never develop symptoms~~ ✓ *→ asymptomatic*
- (c) The development of tophaceous deposits of monosodium urate is a function of the duration and severity of hyperuricaemia ✓
- (d) ~~Symptoms are ameliorated by probenecid~~ ✓ *(uricosuric)*
- (e) It is commonly associated with abnormalities of serum lipids ✓

Handwritten note: Probenecid should not be used in acute flare

46. The following are true of ankylosing spondylitis except:

- (a) The eye is involved ✓ *→ uveitis*
 - (b) Sacroiliitis occurs ✓
 - (c) ~~Anti-CCP antibodies test is invariably positive~~ ✓
 - (d) HLA - B27 is a strong genetic risk factor ✓
 - (e) Etanercept is useful in treatment ✓ *→ TNF alpha antagonist*
- Handwritten note:* TNF alpha indicated after NSAID fails

Handwritten initials: RA

47. The following are true concerning fibromyalgia except:

- (a) Exercise is a crucial element of therapy ✓ *physio x*
- (b) Symptoms are exacerbated by tricyclic antidepressants. *X TCA*
- (c) Fatigue is worsened by physical activity ✓
- (d) Commonly presents with irritable bowel syndrome ✓
- (e) Deficits of attention and memory occur ✓

48. Non-inflammatory causes of monoarthritis include all the following except:

- (a) ✓ Osteonecrosis
- (b) ✓ Hemarthrosis ✓
- (c) ✓ Osteoarthritis ✓
- (d) ~~Reactive arthritis~~ ✓ *polyarthritiB not monoarthritis*
- (e) ✓ Pigmented villonodular synovitis ✓

49. An elderly female patient who is being nursed in hospital following total hip replacemnt surgery is suddenly reported to be diaphoretic and dyspnoeic. On evaluation she is cold, sweaty and tachypnoeic with feeble pulses and is desaturating with SPO₂ 75%. The ECG is significant only for sinus tachycardia of 120 bpm. Which of the following investigations has the highest positive predictive diagnostic value:

- (a) Cardiac troponin
- (b) D-Dimer
- (c) ~~Computer Tomography (CT) - Pulmonary angiography~~ ✓
- (d) Blood gas analysis
- (e) Echocardiography

Pulmonary Embolism

50. As part of a pre operative evaluation, a 75-year old man is incidentally found to have an isolated irregularly irregular pulse at rate 60 bpm; and a 12 lead ECG shows absence of P waves. All the following therapies are potentially indicated except:

- (a) Digoxin ✓ *→ Rate control*
- (b) ~~Warfarin~~ ✓
- (c) ~~DC cardio version~~ ✓
- (d) Amiodarone ✓
- (e) Propafenone ✓

Atrial fibrillation

*C → 1
A X
D X
D -*

51. All of the following are recognized causes of electrocardiographics ST segment elevation except:

- (a) Early ventricular repolarisation ✓
- (b) Pulmonary embolism ✓
- (c) Pericarditis ✓
- (d) Myocardial necrosis ✓
- (e) Ventricular aneurysm formation post M1 ✓

Other
 ✓ Hyperk⁺
 ✓ Cardiac contusion (trauma)
 ✓ Prinzmetal's angina

52. A 16-year-old healthy adolescent is involved in a schoolyard gang fight and stabbed in the chest with a knife in the left midaxillary line. He is taken to the emergency department and on arrival his blood pressure is barely obtainable. His lungs are clear to auscultation. His heart sounds are barely audible. Which of the following is the most likely diagnosis:

- (a) Myocardial contusion ✓
- (b) Aortic laceration ✓
- (c) Pericardial tamponade ✓
- (d) Endocarditis ✓
- (e) Acute MI ✓

Beck's triad for cardiac tamponade
 • HoTN
 • muffled heart sounds
 • Distended neck veins

53. A 50 year old patient with diabetes presents to A & E department at 3 am with a four hour history of on-going severe constricting chest pain. Examination reveals BP 100/60 mm Hg and pulse 120b/min. ECG reveals inferior ST segment elevation. All the following are appropriate therapies in his urgent management except:

- (a) Thrombolysis ✓
- (b) Warfarin ✓
- (c) Percutaneous coronary revascularization ✓
- (d) Beta-adrenergic blocker ✓
- (e) Clopidogrel ✓

used for long term rx for pt who cannot tolerate antiplatelets.

54. A 16 year old patient from rural Kenya has a white blood cell count of 9×10^9 /litre and 60% neutrophils. The haemoglobin is 6.7g/dl, MCV of 59 fl and platelets of 455×10^9 /litre. The spleen is tipped. Which one of the following is the most likely association?

- (a) Presence of Schistosoma haematobium ova in stools ✓
- (b) Presence of Schistosoma mansoni ova in stools ✓
- (c) Presence of Ancylostoma duodenale ova in stools ✓
- (d) Presence of Necator americanus ova in stools ×
- (e) Presence of Taenia saginata ova in stools ×

Splenomegaly

Fe def Anemia

Microcytic hypochromic anemia + Splenomegaly

55. A 15 year old boy patient from Western Kenya had dental extraction of six lower teeth and bleeding continued for over 48 hours, requiring admission in hospital. Which of the following statements is of least importance?

- (a) Presence of global alopecia ~~X~~ →
- (b) History of jaundice weeks prior to the episode ~~X~~ (Liver function)
- (c) History of excessive bleeding from male relatives following minor trauma ~~X~~ (Hemo C)
- (d) Presence of gingival hyperplasia ~~X~~ ALL
- (e) History of menorrhagia in a maternal aunt ~~X~~ (Coagulation)

56. A 25 year old patient has haemoglobin of 5.3g/dl, platelet count of 35×10^9 /litre, total white blood cell count of 6.8×10^9 /litre. There are bilateral cervical nodes measuring 1x2 cm and a tipped spleen. Which one of the following diagnosis is most likely?

- (a) Hypersplenism ~~X~~
- (b) Aplastic anemia ~~X~~ +
- (c) Acute myeloid leukaemia ~~X~~ +
- (d) Myelodysplastic syndrome ~~X~~ +
- (e) Pernicious anaemia ~~X~~

Bicytopenia
↓ Platelet count
↓ Hb

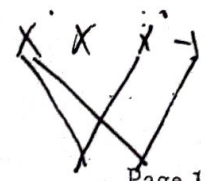
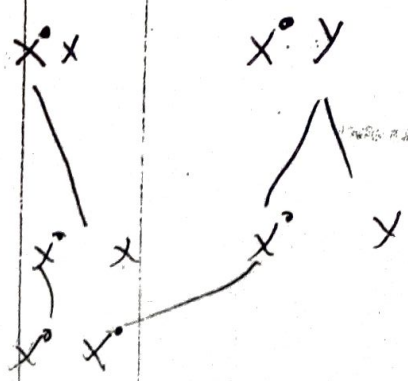
57. A 75 year old adentulous man is pale with a haemoglobin of 4.5g/dl, MCV of 126 fl, total white blood cell count of 1.5×10^9 /litre and platelets of 87×10^9 /litre. Which one of the following can prevent the occurrence of this condition?

- (a) Avoidance of Chloramphenicol ~~X~~
- (b) Eating of well-cooked legumes ~~X~~
- (c) Eating of roasted meat and meat products ~~X~~
- (d) Eating of half cooked vegetables ~~X~~
- (e) Eating of raw fish from the Far East ~~X~~

Macrocytes

58. A 45 year old patient has a diagnosis of multiple myeloma. The haemoglobin is 11g/dl, white cell count is 6.7×10^9 /litre and platelets are 131×10^9 /litre. There are no other significant co-morbidities. Which are of the following drugs should be avoided as much in the treatment of this condition?

- (a) Vincristine ✓ ✓
- (b) Bortezomib ✓ ✓
- (c) Melphalan ✓ *analgesic* → Bm *toxicity* ✓
- (d) Thalidomide ✓
- (e) Doxorubicin ✓ ✓



Endometritis → Sepsis → DIC *Leukocytes*

59. A 23 year old female underwent abortion of a 14 week foetus last week. She is mildly pale and sick - looking. The temperature is 39.7°C, pulse 115/minute, *fast* regular. The haemoglobin is 8g/dl, total white blood cell count 17×10^9 /litre, platelets are 15×10^9 /litre. Which one of the following statements is correct?

DK

- (a) There is underlying acute leukaemia *m. Bone marrow anaemia* X
- (b) The number of bone marrow megakaryocytes is suppressed. X
- (c) There are features of immune thrombocytopenic purpura X
- (d) There is a picture of haemolytic uraemic syndrome X
- (e) There is disseminated intravascular coagulopathy X

Leukocytes

60. A 16 year old patient has had repeated blood transfusions since the age of 14. There is mild jaundice, moderate to mild pallor and tender right hypochondrium. The limbs are thin and some digits of the hands and legs are resorbed. What is the most likely cause of the right hypochondriac tenderness?

visceral

- (a) Hepatocellular carcinoma
- (b) Cholelithiasis X
- (c) Sequestration of red blood cells in the liver ✓
- (d) Amoebic liver abscess
- (e) Typhoid

dactylitis

Sickle cell disease

61. A 64 year old has left cervical and bilateral axillary lymphadenopathy of 2x2 cm. The haemoglobin is 12g/dl, white blood cell count is 5.6×10^9 /litre with 65% neutrophils, platelets are 280×10^9 /litre. Histology and immunohistochemistry have confirmed follicular lymphoma grade 1. Which of the following statements is incorrect?

lymph of blood

- (a) This is indolent disease ✓
- (b) CD 20 is likely to be strongly positive ✓ B
- (c) Chemotherapy should be deferred ✓
- (d) There is a close to 30% chance of transformation to higher grade disease ✓
- (e) This disease is highly curable X

62. Which one of the following is not a post mortem change:

- (a) Adipocere ✓
- (b) Skeletalization ✓
- (c) Putrefaction ✓
- (d) Skin slippage ✓
- (e) Bullae of the meninges X

63. Specimens commonly encountered in routine forensic toxicological investigations include all the following except:

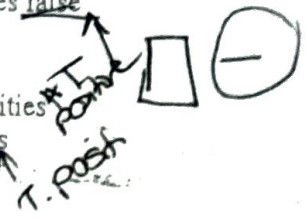
- (a) Stomach ✓
- (b) Small intestine ✓
- (c) Large intestine ✗
- (d) Kidneys ✓
- (e) Liver ✓

64. In cases of suspected chemical poisoning, administration of an appropriate antidote may be vital to saving of life. Which of the following would be the most critical stage in a toxicological investigation in such an incident?

- (a) Sampling and weighing ✗
- (b) Detection and identification ✓
- (c) Isolation and analysis ✗
- (d) Quantification and interpretation ✗
- (e) Detection and quantification ✓

65. In clinical analytical toxicology, colour test and immunoassays are routinely used to fast track and identification process. Which statement best describes false positive result?

- (a) When the substance being tested for is present in minute quantities
- (b) When the substance being tested for is present in large amounts
- (c) When the substance being tested for is absent. *emergence*
- (d) Presence of a substance other than that being tested for *T. Post*
- (e) When there is not reaction *negative*



66. Which of the following is not a true cause of death:

- (a) Brain abscess ✓
- (b) Head injury ✓
- (c) Cardio pulmonary arrest *mechanism*
- (d) Gunshot wound to abdomen ✓
- (e) Bronchopneumonia ✓

chronic bronchitis: Obstructive. FEV₁/FVC <

67. A 62 old male presents with a 6 month history of cough, progressive shortness of breath and sputum production. He has a 40 pack year history of smoking. He has no orthpnoea characteristic changes in lung function in this patient would include:

- (a) Normal functional residual capacity (FRC) ✗
- (b) Increased FEV₁ ✗
- (c) Normal FEV₁/FVC ratio ✗
- (d) Reduced residual volume to total lung capacity ration (RV/TLC) ✓
- (e) Reduced diffusion capacity for carbonmonoxide ✗

COPD

CO diffusing capacity is ↓ in proportion to severity of emphysema

functional residual capacity → amount of air that remains in the lungs after tidal expiration
 ↓ in COPD by restriction of lung

- ↑ in total lung capacity.
- ↑ in functional residual capacity
- ↑ in residual volume.
- ↓ vital capacity.

68. A 30 year old female presents with a history of tender nodules over her shins, fever and cough. A chest x-ray reveals symmetrical bilateral hilar lymphadenopathy. Additional expected findings include all except:

- eryth nodosa
- (a) Hypo-gammaglobulinaemia ~~✓~~ polyclonal hypergammaglobulinaemia
- (b) Plural effusion ✓
- (c) A positive tuberculin test ✓
- (d) Spontaneous remission within 2 years ✓
- (e) Hyperuricaemia ✓

69. The following agents are useful in the management of severe COPD except:

- (a) Promethazine ✓
- (b) Dihydrocodeine ✓ → for dyspnoea
- (c) Frusemide ~~✓~~ → pulmonary HTN → (or pulmonary)
- (d) Mometasone ✓
- (e) Ambulatory oxygen ✓

70. Recognized pulmonary complications of uncontrolled rheumatoid arthritis include all of the following except:

- Pulmonary cavitation
2° TB
1° pneumothorax
COPD
- (a) Bronchiolitis obliterans ✓
- (b) Pulmonary eosinophilia ✓
- (c) Pleural effusion ✓
- (d) Pulmonary nodules ✓
- (e) Pulmonary embolism ✓
- Pulmonary fibrosis is most common
pleural effusion
COPD's syndrome
Rheumatoid nodules + pneumoconiosis
Bacterial & viral bronchitis

71. A lateral chest x-ray which reveals a mass posteriorly overlying the spine suggests the possibility of a:

- (a) Thymoma ✓
- (b) TB abscess ✓
- (c) Pericardial cyst ✓ → right cardiophrenic angle
- (d) Retrosternal goitre ✓
- (e) Bronchogenic cyst ✓ → middle mediastinum (mediastinal mass)

72. Juma, a 56 year old office worker with 20 pack year history of smoking presents with 14 day history of fever and coughing up blood (5-10ml in the previous day). He is known to have COPD and coronary artery disease. He takes aspirin, metoprolol and lisinopril as well as tiotropium and salbutamol. On examination, the temperature is 37.8°C and has bilateral wheeze. The chest x-ray is normal which one of the following is the most likely cause of haemoptysis in this patient?

- (a) Acute bronchitis ✓
- (b) Tuberculosis ✓
- (c) Lung cancer ✓
- (d) Medications ✓
- (e) Pulmonary embolism ✓

Pneumothorax
S. aureus

73. All of the following statements regarding anti-tuberculosis therapeutic agents are true except:

- (a) Over 90% of M tuberculosis isolates resistant to rifampicin are also resistant to Isoniazid
- (b) Rifabutin should be used instead of rifampicin in patients receiving protease inhibitors ppi ✓
- (c) Rifaicin decreases the half-life of warfarin
- (d) Peripheral neuropathy is the most severe complication of ethambutol
- (e) Pyrazinamide is an effective second-line agent in patients with MDR-TB

74. The following are correctly matched except:

- (a) Infective endocarditis - Roth spots ✓
- (b) ~~Mitral stenosis~~ Aortic regurgitation - Tapping apex beat ✓
- (c) Tricuspid stenosis - Cannon waves ✓
- (d) Tetralogy of fallot - Right ventricular hypertrophy ✓
- (e) Aortic stenosis - syncope ✓

Thrusting →
Aortic valve disease
Double thrust → 3rd
Aortic stenosis (heart & aortic)

75. The following are causes of secondary polycythaemia except:

- (a) Smoking ✓
- (b) Renal cyst ✓
- (c) A high altitude ✓
- (d) Diabetes mellitus
- (e) Chronic obstructive airway disease ✓

Red cell mass
CO in smokers ⇒ ↑ affinity for Hb
hypoxemic triggers Secondary polycythemia
hypoxemia

76. Permanent pacemaker is indicated in the following conditions except:

- (a) Sick sinus syndrome ✓
- (b) Mobitz type 1 secondary to AV block ✓
- (c) 3rd degree AV block ✓
- (d) Mobitz type 2 secondary to AV block ✓
- (e) None of the above

77. A young patient presents with a 4 month history of fever, night sweats and recent onset of pedal swelling and fatigue. On physical exam he has a weak thready pulse, difficult to trace apex beat and distant heart sounds. Commonest cause of death in this condition is:

- (a) Pulmonary oedema
- (b) Hyperkalemia
- (c) Septicaemia
- (d) Tamponade ✓
- (e) Acute kidney injury

78. All the following are true regarding heart failure except:

- (a) Cachexia is primarily due to poor feeding ✓
- (b) Hypotension is common ✓
- (c) Jaundice occurs early ~~late~~ ✓
- (d) Diuretics relieve symptoms ✓
- (e) Anaemia worsens symptoms ✓

79. Which one of the following is not a treatment of choice in Non-steroidal anti-inflammatory drug (NSAID) induced bleeding duodenal ulcer:

- (a) Omeprazole 80 mg bolus then infusion at 8 mg/hr ✓
- (b) Octreotide infusion at 25 - 50 IU/hr ~~vancomycin~~ bleeding ✓
- (c) Stop NSAID ✓
- (d) Treat H.pylori if positive ✓
- (e) Endoscopic thermal treatment ✓

* 80. The following are laboratory findings in Hepatitis B inactive carrier state except:

- (a) HBsAg positive ✓
 - (b) HBeAb positive ✓
 - (c) HBV DNA 100 IU/ml ✓
 - (d) Alanine transaminase (ALT) 20 U/L ✓
 - (e) Bridging fibrosis ✓
- persistent infection but NO liver inflammation
Acute hepatitis 17-55 units/L

81. The following findings are compatible with chronic pancreatitis except:

- (a) Blood sugar > 20 mmol/L ✓
- (b) 24 hour fecal fat of 30 gm/day ✓
- (c) Serum amylase of 3000 IU/ml - Acute pancreatitis ✓
- (d) Calcification on a plain abdominal x-ray ✓
- (e) MRCP showing abnormal pancreatic duct ✓

82. Which one of the following is not associated with secretory diarrhea:

- (a) Gastrinoma ✓
- (b) Cholera ✓
- (c) Enterotoxigenic E.coli
- (d) Excess pus cells on stool microscopy infectious ✓
- (e) Diarrhea persisting with fasting

(Osmotic diarrhea)

83. Which one of the following is correctly matched:

- (a) Lymphoedema - Onchocerciasis
- (b) River blindness - Reduviid bug - vector for T. cruzi ✓
- (c) Winterbottom sign - Wuchereria bancrofti - T. brucei (swelling of cervical LNs) ✓
- (d) Buruli ulcer - Gram negative organisms
- (e) Hexheimer reaction - syphilis treatment ✓

resembles bacterial sepsis
Assoc c penicillin Rx of syphilis

84. Which of the following are not correctly matched as pathogen/parasite - vector?

- (a) S. mansoni - Biomphalaria species ✓ schist.
- (b) P. falciparum - female anopheles mosquito ✓ ✓
- (c) Lyme disease - ixodes ricinus tick ✓ ✓
- (d) T. brucei rhodesiense - Simulium fly - *Orchocera volutus*
- (e) Leishmania - sand fly ✓ ✓

85. A 2 months pregnant woman, who normally resides in Nairobi is on holiday at Mombasa. She has not taken any malaria prophylaxis medication. She develops rigors and fevers temperature 39°C on the 4th day of her visit. Which is the most likely diagnosis:

- (a) Malaria - incubation period is 7 days
- (b) Typhoid - incubation 7-21 days
- (c) Pelvic inflammatory disease
- (d) Urinary tract infection - incubation 3-4 days after exposure
- (e) Brucellosis - incubation 1-2 months

86. A British tourist went boating and swimming in Lake Victoria. A week after, he develops fever, anaemia and lymphadenopathy. All the following statements are true except:

- (a) The condition is related to his contact with lake water ✓
- (b) High eosinophilic count is expected ✓
- (c) Transverse myelitis is a known complication ✓
- (d) Itchiness of the body is a related finding ✓
- (e) Jelly fish sting is the most likely cause of his illness

87. Unilateral ptosis is a feature of:

- (a) 7th cranial nerve palsy ✓
- (b) Polymyositis ✓
- (c) Trochlear palsy
- (d) Myasthenia gravis ✓
- (e) Abducent's palsy

88. All the following are correctly matched except:

- (a) Ataxic nystagmus - Multiple sclerosis
- (b) Pendular nystagmus - Retinitis pigmentosa
- (c) Oculogyric crisis - Uraemic neuropathy
- (d) Postural hypotension - Shy Drager syndrome
- (e) Gustatory sweating - Diabetic neuropathy

89. All the following are correct concerning X-linked dominant disorders except:

- (a) Vitamin D-resistant rickets is an example ✓
- (b) All female offsprings of an affected man will have the disease ✓
- ~~(c) Females do not manifest the disorders.~~
- (d) Half the males or female offsprings of an affected mother have the disease
- (e) No male offspring of an affected man will have the disorder if their mother not affected

90. A 49 year old male painter is diagnosed with diabetes mellitus. He has noted hand and feet changes requiring change of size of working gloves from medium to large in the last 2 years. His shoes size has changed from size 7 to 9. Which of the following statements is true concerning him:

- (a) His libido is expected to increase ↓
- (b) Muscular hypertrophy is usually associated
- (c) This is a recognized side effect of sulphonylurea class of drugs
- ~~(d) Visual deterioration and visual field defects occur~~
- (e) Loss of facial and axillary hair is expected

✓ 91. Aldosterone biosynthesis is positively regulated (stimulated) by the following factors except:

- (a) Renin-angiotensin system ✓
- (b) Potassium ion ✓
- ~~(c) Serotonin~~
- ~~(d) Dopamine → inhibits~~
- (e) Pituitary and non-pituitary ACTH ✓

MRP x 1/20

✓ 92. The following are true of the syndrome of inappropriate antidiuresis (SIAD) except:

- (a) Hyponatremia is a classic finding ✓
- (b) Neoplasia is causally linked ✓
- ~~(c) Acute intermittent porphyria is a nonmetabolic cause~~
- ~~(d) SIAD is a diagnosis of exclusion~~
- (e) Desmopressin is an iatrogenic cause ✓

MRP
1/20

✓ 93. Which of the following condition is associated with metabolic acidosis with a wide anion gap?:

- (a) Pyloric stenosis
- (b) Renal tubular acidosis type 1
- (c) Uretero-sigmoidostomy ✓
- (d) Acetazolamide toxicity
- ~~(e) Diabetic ketoacidosis~~ Expans - Metab - Acidosis

MRP
1/20

P &

A 15 year old boy is evaluated for stunted growth. He has a previous history of limb fractures associated with minimal trauma. Arterial blood assay show pH 7.29 (N=7.34-7.44) Early morning urine pH 7.52 which one of the following is an expected finding:

- (a) Hyperglycaemia
- (b) Hyperkalaemia
- (c) Nephrocalcinosis
- (d) Renal artery stenosis
- (e) Proteinuria

pathological
~~hypokalaemia~~
~~hypocitraturia~~
~~hypercaemic~~

Stages of nephrocalcinosis
 1- chemical nephrocalcinosis
 2- microscopic nephrocalcinosis
 3- macroscopic nephrocalcinosis

Symptoms
 - hypercalcaemia
 - renal calc
 - polyuria
 - polydipsia

Renal tubular dysfunction

95. Modalities of therapy in actively bleeding esophageal varices include all the following except:

- (a) Octreotide infusion ✓
- (b) Band ligation ✓
- (c) Propranolol infusion ✓
- (d) Vasopressin administration ✓
- (e) Sclerotherapy ✓

96.

A 56 year old woman presents with polyuria, polydipsia and progressive weakness. She had been discharged from hospital two weeks prior, where she had been managed for a concussion injury. Random blood sugar is 4.2 mmol/L. Urinalysis shows low osmolality. Which of the following statements is true?

- (a) ✓ Hyponatremia is a feature ✓ *ADH*
- (b) X Masked diabetes mellitus is a likely diagnosis ✓ *Diabetes insipidus*
- (c) X Hyperkalaemia is expected ✓
- (d) X Hypocalcaemia is an expected cause of this presentation ✓
- (e) X Hypertonic saline improves the situation if hypotension occurs ✓

97. The metabolic syndrome is defined by the presence of the following except:

- (a) ✓ Abdominal obesity ✓ *Metabolic syndrome*
- (b) ✓ Hypertension ✓
- (c) ✓ High HDL-cholesterol ✓
- (d) ✓ Hypertriglyceridemia ✓
- (e) X Improved glucose tolerance ✓ *↓ OGTT (DM)*

98. Which one of the following is not true of Wuchereria bancrofti?

- (a) Transmitted by the Culex mosquito ✓ *Ades canopheles*
- (b) Associated with nocturnal periodicity ✓ *10pm-2am*
- (c) Associated with pulmonary eosinophilia ✓
- (d) Prevented by treating the whole population with diethylcarbamazine ✓ *ivermectin*
- (e) There are no serologic tests for its diagnosis ✓

Transmission: - Anopheles in Africa, Culex quinquefasciatus in America, Aedes aegypti in Asia & Pacific, A. stephensi in India

99. A 20 year old male presents with a 3 week history of fever and constipation. On examination he is found to be febrile at 38°C and to have splenomegaly of 3cm below the costal margin. Which one of the following is not an appropriate investigation:

- (a) Blood culture ✓
- (b) Urine culture ✓
- (c) ~~Widal test~~
- (d) Demonstration of rising antibody titres ✓
- (e) Stool culture ✓

✓ sign of IgG → LPS

Morganella morganii

100. A young girl from North-Eastern province presents with sudden onset of fever associated with right upper quadrant pain that increases on deep breathing. She has a tinge of jaundice and a raised white cell count. Which statement is false regarding this condition?

- (a) Imaging of the abdomen is indicated ✓
- (b) ~~A calculus (stone) in the gall bladder is common~~
- (c) Antibiotics are useful in the management ✓
- (d) ~~Surgery is of proven benefit~~
- (e) Courvoisier's sign is invariably positive ✓

ultrasound Murphy's sign

Always available

invariably positive for head of pancreas.

Courvoisier's Sign

If there is a palpable gall bladder which is painless. Suggest a cause other than gallstone

Leish	9:1-4
1 st corinth	1:10-13 17
matthew	4:12-23

Check by
Cousin