

\*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 ✓ (Gonorrhoea)   |
| (e) Urethral discharge ✓       | - Mycoplasma hominis ✓ (Non gonorrhoeal) |

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?

- Pneumonia*
- (a) Amoxicillin/clavulanic acid ✓ *penicillins*
- (b) Doxycycline ✓ *Tetracycline antibiotic → treat pneumonia & upper respiratory infection*
- (c) Azithromycin ✓ *cephalosporin 3rd generation*
- (d) Ciprofloxacin ✓ *fluoroquinolone*
- (e) Cefuroxime ✓ *cephalosporin*

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

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
- aminoglycoside*
- 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 colitis (C. difficile associated diarrhoea)  
 Rx: 5 metronidazole or vancomycin

- (a) Oral ciprofloxacin ✗
- (b) Oral Metronidazole *clonidine, d. (b) 1/2*
- (c) Oral sulfamethoxazole trimethoprim ✗
- (d) Continue oral clindamycin ✗
- (e) Oral amoxicillin ✗

\* 6. Which one of the following is not essential in the diagnosis of severe sepsis? (1) M, (2) P, (3) R-R, (4) WBC

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

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: *1. cryptococcal meningitis*

- (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 ✓

8. A patient presents to the Accident and Emergency department with diplopia. Which of the following is inconsistent with a diagnosis of right 3<sup>rd</sup> cranial nerve palsy? *400-800mg* *3rd cranial nerve*

- (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 ✓

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

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

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

- (a) ~~Sparing of frontalis muscle~~ ✓ *eg: stroke*
- (b) ~~Altered taste sensation~~
- (c) ~~History of preceding respiratory infection~~ - *assoc. of VRTI 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, white ↓*
- (c) ~~In listeria meningitis, the CSF protein is usually normal~~ ✓ *in most cases*
- (d) ~~In bacterial meningitis, the CSF glucose is usually normal~~ ✓ *low glue / high prot*
- (e) ~~In sub-arachnoid hemmorrhage, the CSF colour does not change~~ ✓ *↑ protein, white ↓*

12. All the following are features of pellagra EXCEPT:

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

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

- (a) ~~Iron deficiency - Brittle bones~~ ✓ *Calcium*
- (b) ~~Iodine deficiency - Anxiety~~ ✓ *Goitre*
- (c) ~~Fluoride deficiency - dysphagia~~ ✓ *osteoporosis*
- (d) ~~Zinc deficiency - Reduced immunity~~
- (e) ~~Calcium deficiency - Goitre~~ ✓ *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~~ ✓ *HIV*
- (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~~ ✓ *6, 12 every*
- (d) ~~Pruritic papular eruptions after 6 months on ART~~ ✓
- (e) ~~Recurrent WHO Stage 2 illness after 6 months on ART~~ ✓

III OR IV

21, 42, 33, 147

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 amino transferase (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

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/ $\mu$ L. She has not yet commenced ART. Examination reveals left-sided hemiplegia. The most likely diagnosis is:-

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

18. A 45 year old man presents with chronic watery diarrhoea 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

19. 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/ml. 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

Done 6-10 days after admission & use to define severity of pancre

20. 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 ✓

- GERD  
- PPIs

is septal organ failure or clinical deterioration.

21. A patient presents with hematemesis 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 ✓ - oesophageal
- (d) Propranolol ✓
- ~~(e) Porto caval shunting~~

GIT bleeding

used in severe bleeds & where other rxn helpful

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

seizures use phenytoin or 300 mg

↑ ↑ ↑  
↑ ↑ ↑  
↑ ↑ ↑  
↑ ↑ ↑  
↑ ↑ ↑

23.

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

- HBsAg Positive
- anti-HB<sub>s</sub> Negative
- IgG anti HBC Positive
- IgM anti HBC Negative
- HB<sub>e</sub> Ag Positive
- Anti-HB<sub>e</sub> Negative

*84 symptoms - could be chronic or acute*  
*Immunity*  
*Previous (ongoing) T*  
*viral replication + infection*  
*viral replication and infection*

*ye in Hepatic*

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

*anti HBs x / B A x*

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 transferase (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 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
- (e) It increase the risk of GERD

*PUD*

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

*odynophagia -> a condition in which pain food is swallowed*

0703107061 -> Bishop ASKofm

The following are known to cause focal segmental glomerulosclerosis (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  
conformed with history

1° FSGS -

Drugs

- 2° 1 - IV heroin
- analgesics
- lithium
- Anabolic

viruses

- tumors
- Lymphoma
- HIV, hep
- Parvovirus
- hemorrhagic
- Obesity

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 release of muscle fibre content into the blood
- (d) Microangiopathic Hemolytic Anemia (MAHA) X
- (e) Shock ✓ - rigid shock

trauma, compartment  
neuropathic  
Plasmodium  
causes  
nemia +  
schistosomes  
cure in 1-2 hrs

29.

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

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

- ©
- 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 ✓

31.

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

- (a) Glomerular Basement Membrane (GBM) thickening occurs in stage 1 X - stage II
- (b) Stage 2 is characterised by microalbuminuria X - stage III
- (c) Stage 3 is quiescent X
- (d) Stage 4 disease has reduced glomerular filtration rate (GFR) ✓
- (e) Macroproteinuria is present in Stage 3 X - stage IV

I - Hypertension GFR > 120 0yr

II - GFR thickening (10 yrs) 90ml

III - ↓ GFR < 80 microalbuminuria 20-14

IV - nephrotic range proteinuria ~~1000~~ after 14 yrs

V - End-stage 26ml

A BOD FOR CIPRO

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

- (a) Female are more predisposed ✓ Short urethra (Penis in 10 cm)
- (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 anaemia, spastic paraplegia, and lytic lesions on skull x-rays is found to have a serum Creatinine of 380  $\mu$ mol/L. All the following are possible causes of renal failure in him except: AKI

- (a) Bladder outlet obstruction ✓
- (b) Hypercalcaemia chronic ✓
- ~~(c)~~ Paracetamol ingestion
- (d) Hyperuricaemia ✓ - uric acid crystals
- (e) Sepsis ✓ MODS - AKI - HF

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 ✗
- (c) Proteinuria usually persists for longer than 6 months post delivery ✗
- (d) Termination of pregnancy is mandatory ✗
- (e) Hypermataemia is commonly associated ✗

35. A patient with HIV/AIDS and CD4<sup>+</sup> count of 10/mm<sup>3</sup> 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 ✗ - papules & patches
  - ~~(c)~~ Pyoderma gangrenosum
  - (d) Furunculosis ✗
  - (e) Cellulitis ✗
- Handwritten notes on right:   
- mild - severe - E. coli - Comm.   
- 1200 - 60   
- 7/160 - 1000   
- 1000 - 1000   
- 1000 - 1000   
- 1000 - 1000

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



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

- (a) Malar erythema ✓
  - (b) Psoriasiform ✓ - *psoriasiform*
  - (c) Discoid ✓
  - (d) Vasculitic ✓
  - (e) Nodular prurigo - like ✓
- photosensitivity peri-ungal  
Xeroderma Raynaud's  
hives bullae  
lichenoid DHS  
small vesic*

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 ✓
- Anaphylactic hypersensitive  
Secure airway - O2  
Raise feet to rise BP  
Adrenaline - antihistamine  
steroids  
fluids*

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??

- (a) Pulse rate ✓
  - (b) Serum urea ✓
  - (c) Haemoglobin ✓
  - (d) Blood glucose ✓
  - (e) Serum bicarbonate ✓
- Toxic epidermal necrolysis  
SCORTEN  
Age  
HR  
Serum BUN  
Serum glucose  
serum bicarbonate  
detached & compromised body surface*

40. All the following are associated with photosensitivity except:

- (a) Dermatomyositis ✓ *B2*
- (b) Pellagra ✓ *AD, Dementia, Tremors, Depression, Deafness*
- (c) Lupus erythematosus ✓ *SOPP BRATN MD*
- (d) Porphyrin 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 - *eczema variant*
- (b) Irritant contact dermatitis
- (c) Seborrheic dermatitis - *HIV*
- (d) Atopic dermatitis
- (e) Nummular dermatitis

*inability to stand, weakness  
Dermatomyositis - Gottron's papules*

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)~~ Arthrocentesis is contraindicated *a (Definitive dx/crit)*
- (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) Corticosteroids ✓
- (c) Colchicine ✓
- ~~(d)~~ Allopurinol ✓
- (e) Adrenocorticotrophic hormones (ACTH) ✓

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 tophaceous 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 ankylosing spondylitis except:

- (a) The eye is involved ✓ *(Acute anterior 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 ✓

*Rheumatoid factor tests negative*  
*Entesopathy*

*indicated after*  
*NSAID fails*  
**EMO** - NSAIDs \*  
- anti-TNF- $\alpha$  receptor - Etanercept \*  
- MTX \*  
- sulfasalazine \*  
- steroids \*

The following statements concerning fibromyalgia are correct

- forgetfulness  
- Numbness & tingling  
- Nocturn

F.B.M

- (a) Exercise is a crucial element of therapy ✓
- (b) Symptoms are exacerbated by tricyclic antidepressants ✓
- (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 ✓ = Polyarthriti
- (e) Pigmented villonodular synovitis ✓

49. An elderly female patient who is being nursed in hospital following total hip replacement surgery is suddenly reported to be diaphoretic and dyspnoeic. On evaluation 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:

Pv  
ME

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

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:

Atrial fibrillation

- (a) Digoxin ✓
- (b) Warfarin ✓
- (c) DC cardioversion ✓
- (d) Amiodarone ✓
- (e) Propafenone ✓

9/16  
9/18  
9/20  
9/22

- Ant MI
- Hyperk
- LVH
- Hypothermia
- Transmural ischaemia
- I.R.A.

of fungus 51.

All of the following are recognized causes of electrocardiographic ST segment elevation except:

Other  
✓ Hyperk<sup>+</sup>  
✓ Cardiac contusion (trauma)  
✓ Pericarditis/angina

ST elevation  
- acute pericarditis  
PE  
- hypertrophic CM  
52.  
- hypertensive

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

A 16-year-old healthy adolescent is involved in a schoolyard gang fight and stabbed in the chest with a knife in the left midclavicular 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:

3000  
300  
Analog  
- PCI  
- Thrombolysis  
- Anticoagulant  
- Antiplatelet (clopidogrel)  
- Statins  
- beta blockers  
- ACE inhibitors

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

Beck's triad  
- Hypotension  
- Muffled heart sounds  
- ↑ JVP

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 within 12hr

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

used for long term rx of patient who cannot tolerate

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

Splenomegaly.

- (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

15. A 25 year old 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 *(Liver function)*
- (c) History of excessive bleeding from male relatives following minor trauma *(Hemorrhage)*
- (d) Presence of gingival hyperplasia
- (e) History of menorrhagia in a maternal aunt *(Woman)*

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

- (a) Hypersplenism
- (b) Aplastic anemia
- (c) Acute myeloid leukaemia *68-old*
- (d) Myelodysplastic syndrome
- (e) Pernicious anaemia

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  $1.5 \times 10^9$ /litre and platelets of  $87 \times 10^9$ /litre: Which one of the following can prevent the occurrence of this condition?

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

58. A 45 year old patient has a diagnosis of multiple myeloma. The haemoglobin is 11g/dl, white cell count is  $6.7 \times 10^9$ /litre and platelets are  $131 \times 10^9$ /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 ✓
  - (d) Thalidomide ✓
  - (e) Doxorubicin ✓ ✓
- ✓

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  $39.7^{\circ}\text{C}$ , pulse 115/minute, regular. The haemoglobin is 8g/dl, total white blood cell count  $17 \times 10^9$  litre, platelets are  $15 \times 10^9$  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 coagulopathy

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?

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

61. A 64 year old has left cervical and bilateral axillary lymphadenopathy of  $2 \times 2$  cm. The haemoglobin is 12g/dl, white blood cell count is  $5.6 \times 10^9$ /litre with 65% neutrophils, platelets are  $280 \times 10^9$ /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

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

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 ✗
- (d) Presence of a substance other than that being tested for ✗
- (e) When there is not reaction ✓

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

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

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 FEV<sub>1</sub> ✗
- (c) Normal FEV/FVC ratio ✗
- (d) Reduced residual volume to total lung capacity ration (RV/TLC) ✗
- (e) Reduced diffusion capacity for carbonmonoxide ✓

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:

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

causes of Bilateral

~~Engelhardt-Helms~~  
Sarcoidosis  
TB, mycoplasma  
Malignancy  
Organ part Rx  
Hidradenoma

69.

The following agents are useful in the <sup>man</sup>arrangement of severe COPD except:

- (a) Promethazine ✓
- (b) Dihydrocodeine ✓
- (c) Frusemide
- (d) Montelukast ✓
- (e) Ambulatory oxygen ✓

70.

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

- (a) Bronchiolitis obliterans ✓ ✓
- (b) Pulmonary eosinophilia ✓
- (c) Pleural effusion ✓ ✓
- (d) Pulmonary nodules ✓ ✓
- (e) Pulmonary embolism

71.

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

- (a) Thymoma ~~X~~
- (b) TB abscess
- (c) Pericardial cyst ~~X~~
- (d) Retrosternal goitre ~~X~~
- (e) Bronchogenic cyst ~~X~~

72.

Junia, 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 ~~X~~
- (b) Tuberculosis ~~X~~ ~~X~~
- (c) Lung cancer ~~X~~
- (d) Medications ~~X~~
- (e) Pulmonary embolism



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) Rifampin 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) Aortic regurgitation - Tapping apex beat ✓
- (c) Tricuspid stenosis - Cannon waves ✓
- (d) Tetralogy of fallot - Right ventricular hypertrophy ✓
- (e) Aortic stenosis - syncope ✓

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 ✓

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

- (a) Sick sinus syndrome ✓
- (b) Mobitz type 1 secondary to AV block ✓
- (c) 3<sup>rd</sup> 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 ✓
- (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 ✓
- (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

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*
- (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 - Reduvid bug - vector for *T. cruzi*
- (c) Winterbottom sign - Wucherria bancrofti - *T. brucei*
- (d) Buruli ulcer - Gram negative organisms
- (e) Hexheimer reaction - syphilis treatment

*(swelling of cervical LNs)*

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 - *Ornithoeca voluvis*
- (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 4<sup>th</sup> 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) 7<sup>th</sup> cranial nerve palsy ✓
- (b) Polymyositis ✓
- (c) Trochlear palsy
- ~~(d)~~ Myasthenia gravis - Bilateral
- (e) Abducent's palsy

88

All the following are correctly matched except:

- (a) Ataxic nystagmus - Multiple sclerosis ✓ *T. Conak*
- (b) Pendular nystagmus - Retinitis pigmentosa ✓
- ~~(c)~~ Oculogyic 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~~
- (e) Pituitary and non-pituitary ACTH ✓

NRP 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 ✓

2/14

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 ✓ *electrolytes*
- (d) Acetazolamide toxicity
- ~~(e) Diabetic ketoacidosis~~ *Ketones - Metabolic - Acidosis*

Ris - 1/20

94. 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

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

Symptoms  
 - hypercalcaemia  
 - renal colic  
 - myeloma  
 - polydipsia

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

- (a) Octreotide infusion ✓ - somatostatin
- (b) Band ligation ✓
- (c) Propranolol infusion - propranolol
- (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 ✓
- (b) 'Masked' diabetes mellitus is a likely diagnosis ✓
- (c) Hyperkalaemia is expected →
- (d) Hypocalcaemia is an expected cause of this presentation
- (e) Hypertonic saline improves the situation if hypotension occurs

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

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

5 risk factors of metabolic syndrome  
 1- obesity (large waistline)  
 2- high level of triglycerides (hypertriglyceridemia)  
 3- low HDL  
 4- high blood pressure  
 5- high fasting blood sugar  
 6- high LDL + smoking

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

Control via control vectors

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 ✓

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
- Courvoisier's sign is invariably positive *↳ On head of pancreas.*

### Courvoisier's Sign

If there is a palpable gall bladder which is in conjunction with painless jaundice suggest a cause other than gallstone

1st	9:1-4
2nd	10-13 17
3rd	12-23

Handwritten notes on the right margin, including "M. D. ..."

Handwritten squiggle on the right margin.