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UNIVERSITY OF NAIROBI

College of Health Sciences

SCHOOL OF MEDICINE

DEPARTMENT OF SURGERY

MBChB V **END OF ROTATION** CONTINUOUS ASSESSMENT EXAMINATION
(MCQ)

DATE: 12/10/2015

TIME: ALLOCATED 1½ HOURS - 9.00 AM. - 10.30 A.M.

INSTRUCTIONS:

YOU HAVE BEEN GIVEN 100 MULTIPLE CHOICE QUESTIONS. CHOOSE THE BEST ANSWER. EACH CORRECT ANSWER EARNS ONE MARK. ANSWER IN THE ANSWER SHEET PROVIDED

✓ 1. A 27 year old woman experiences peri-oral numbness the morning after neck surgery. What is the most likely cause of her symptoms:

- A. Hypokalaemia
- B. Hypercalcaemia
- C. Hypocalcaemia
- D. Hypochloreaemia
- E. Hyperkalaemia

Post-op complication of neck surgery

✓ 2. A 40 year old man undergoes laparotomy for small bowel obstruction due to adhesions. During the release of the adhesions an enterotomy is made in the obstructed but viable gut resulting in spillage of faecal material into the abdomen. This converts the wound to:

- A. Clean contaminated
- B. Secondary
- C. Infected
- D. Contaminated
- E. Clean

→ Healing by 3rd intention

✓ 3. Delayed primary wound closure would be most appropriate for the following procedure:

- A. Removal of perforated appendix
- B. Repair of wound dehiscence one week after colectomy
- C. Emergency drainage of a diverticular abscess with sigmoid resection and end colostomy
- D. Partial gastrectomy for a bleeding duodenal ulcer
- E. Repair of incisional hernia 10 weeks after an elective left colectomy complicated by a wound infection and a resultant incisional hernia

Healing by 1st

intention - clean surgical wound freshly sutured & heals w/o complications

Healing by 2nd

- wound left open; granulate to form; contraction of the wound

Healing by 3rd

- delayed closure of open wound; initially debrided & covered with a dressing; closed either directly using staples or skin grafts

4. Several studies have followed up patients with asymptomatic gallstones. What percentage of patients develops symptoms after 5-20 years?

- A < 2%
- B 10-20%
- C 30-40%
- D 50-60%
- E 60%

5. In a patient with hypovolaemic shock, which cannular size would you ideally choose for infusion?

- A 21G
- B 19G
- C 14G
- D 26G
- E 30G

6. Charcot's triad consists of:

- A Fever, nausea and vomiting
- B Pain, nausea and jaundice
- C Pain, nausea and vomiting
- D Pain, jaundice and fever
- E Jaundice, fever and nausea

7. Meigs's disease is:

- A The familial form of lymphoedema praecox
- B Not a familial disease
- C Caused by filarial worms
- D Secondary lymphoedema
- E Post-axillary surgery lymphoedema of the upper limb

8. Falsely high non-invasive blood pressure measurements may not be associated with:

- A Relatively smaller cuffs
- B Loosely applied cuff
- C Extremity below the heart
- D Even compression applied on arm
- E Larger cuffs

9. In anorectal malformation, the following statements are true except:

- A Occurs in one in 5000 births
- B The commonest lesion in females is recto-vaginal fistula
- C Recto-urethral fistula is the commonest lesion in males
- D Persistent cloaca is the third most common lesion in females
- E Imperforate anus in males or females occurs in under 12% of cases

- ✓ 10. The following lesions are developmentally similar except:-
- ✓ A. Rectal urethral fistula ✓ (ARMS)
 - ✓ B. Imperforate anus ✓
 - ✓ C. Recto-vestibular fistula ✓
 - ✓ D. Persistent cloaca ✓
 - E. Rectal atresia

- ✓ 11. Which of the following lesions will require colostomy as an emergency life saving procedure?
- A. Imperforate anus in males and females w/o fistula
 - B. Perineal fistula in both sexes
 - C. Rectovestibular fistula F
 - D. Recto-urethral fistula M
 - E. Persistent cloaca

✓ 12. Mrs Joseph, a 47 year lady is complaining of epigastric and right hypochondrial pain. She has nausea and has been vomiting for the last 24 hours. She recalls that the symptoms started when she was eating a cheese cake. The pain did not respond to over the counter antacids and prokinetic drugs which she tried. On examination she was an obese lady. Her liver enzymes are marginally elevated. Which ONE of the following is the most appropriate next investigation? Gallstones

- A. Erect abdominal x-ray ✓ * 5 Fs - cholelithiasis
- B. Endoscopy
- C. Ultrasound scan of the abdomen
- D. H1 breath test for H pylori ✓
- E. CT abdomen

FAST

- 1) massive patch - peritoneal & hepatic
- 2) Rupture
- 3) RD
- 4) Pericardium (subphrenic)

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 13-17. Each choice may be used once, more than once or not at all.

- A. Immediate laparotomy
- B. Diagnostic peritoneal lavage
- C. Abdominal CT scan
- D. Observation
- E. Pericardiocentesis

Return to domain

13. Haemodynamically stable road traffic accident (RTA) victim with free gas under the diaphragm. **A**

14. Haemodynamically stable RTA victim who has blunt abdominal trauma with a grade I liver injury on CT scan. **D**

15. Patient with multiple rib fractures without haemo/pneumothorax but has hypotension, distant heart sounds and low blood pressure following blunt chest trauma. **E E** (Beck's triad of cardiac tamponade: ↑ JVP, ↓ BP, ↓ heart sounds)

16. Patient with ruptured urinary bladder following blunt abdominal trauma. **A**

17. Patient who presents two days after blunt abdominal trauma with tachycardia, fever and abdominal distension. **B A** (No unstable fracture/abscess)

18. Which one of the statements is INCORRECT with regard to sepsis

- A. Tachycardia or tachypnea may be a sign ✓ ✓
- B. Sepsis is defined as systemic inflammatory response syndrome in the presence of infection ✓
- C. Leucocytosis or leukopenia may be a sign ✓ ✓
- D. Sepsis and hypotension is defined as septic shock
- E. Temperature greater than 38 or less than 36 may be a sign ✓

19. Which of the following clinical conditions is not associated with rapid gastric emptying? *5-10% of population*

- A. Pancreatic insufficiency ✓ - hypoglycaemia due to excess release of insulin
- B. Hyperthyroidism ✓
- C. Hypocalcaemia → ↑ SM tone → ~~colic~~
- D. Impaired fat absorption ✓
- E. Zollinger-Ellison syndrome ✓

Chest Trauma

1) Tension pneumothorax - air enters through small intercostal space
- dependent chest tube

(1) Simple pneumothorax - clear wound above/below chest drain

2) Open chest wound - avoid going into one way valve by chest glue - trapping

(2) Hemothorax - chest drain

3) Hemothorax - chest tube, chest tube, transecting

(3) Pul contusion - airway & chest physio

4) Cardiac tamponade - signs of distended neck veins, muffled heart sounds (Beck's triad)

(4) Trachobronchial injuries - Sx

5) Flail chest - multiple rib fractures, multiple rib fractures

(5) Blunt cardiac trauma (contusion, laceration) - Sx: arrhythmia, myocardial injury

20. Infection with *Helicobacter pylori* has been associated with all of the following conditions EXCEPT:-

- A. Duodenal ulcer ✓
- B. Gastric cancer ✓
- C. Mucosa associated lymphoid tissue (MALT) lymphoma ✓
- D. Gastroesophageal reflux disease (GERD) ✗
- E. Chronic gastritis (Type B) ✓

21. A 75 year old man taking NSAIDs for arthritis has an acute abdomen and pneumoperitoneum. His symptoms are 6 hours old and his vital signs are stable after the infusion of 1L of normal saline solution. What should the next step in the management of this patient? *Perforated ulcer*

- A. Computed tomography of the abdomen
 - B. Esophagogastroduodenoscopy (EGD) ✗
 - C. Antisecretory drugs, broad spectrum antibiotics, and surgery if he fails to improve in 6 hours
 - D. Antisecretory drugs, antibiotics for *H. pylori*, and surgery if he fails to improve in 6 hours
 - E. Surgery
- * Erect xray - free gas under diaphragm
CT - diffn ul perforation
+ Rx - excise & analgesia
- following resect the ex is principally in pyloroplasty / omental patch.
- Systemic ABs + peritoneal lavage
- fail in antisecretory drugs started immediately.*

24. Which of the following is the best test to confirm eradication of *Helicobacter pylori*?

- A. Negative histology after biopsy during endoscopy
 - B. Negative faecal antigen test
 - C. Negative urea breath test *hydrolyses urea*
 - D. Negative urea blood test ✗
 - E. Negative urine antigen ✗
- 30-34 breath tests*

22. A 45-year old man requires surgery for an intractable duodenal ulcer. which operation best prevents ulcer recurrence *Repeat EGD biopsies*

- A. Subtotal gastrectomy
- B. Truncal vagotomy and pyloroplasty
- C. Truncal vagotomy and antrectomy - 1% recurrent ulcers
- D. Selective vagotomy - 5-10%
- E. Highly selective vagotomy - 2-10%

23. The most common cause of gastric outlet obstruction in adults is

- A. Peptic ulcer disease ✗ *Rarely benign & PUD*
- B. Extrinsic neoplastic compression
- C. Cancer *37% benign; the rest due to malignancy*
- D. Primary lymphoma of the stomach ✗
- E. Duodenal Crohn's disease ✗

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 25-29.

- A. Fluctuating levels of consciousness
- B. Lucid interval
- C. Posterior fossa tumour
- D. Bitemporal hemianopsia
- E. Retroviral infection

SDH - middle meningeal artery - 50-10% w/ pupils

lucid interval
biconvex / lentiform

- A 25. Chronic subdural haematoma ^A ~~B~~ _{may not prod. sympt. till weeks after trauma; delayed neurological deterioration.}
- B 26. Extradural haematoma ^{A B}
- D 27. Pituitary adenoma ^{D D}
- C 28. Ventriculoperitoneal shunt is indicated ^{C C}
- E 29. Primary brain lymphoma ^{E E}

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 30-34. MATCH THE CHOICES WITH THE MOST APPROPRIATE ANSWER.

- A • Stewart-Treves' syndrome ^{lymphangiosarcoma} → in lymphatics ca over chest lymphoedema due to mastectomy and/or radiotherapy for breast ca
 - B • Von Hippel-Lindau disease → mutation of VHL suppressor gene; hemangioblastomas, pheos, RCC
 - C • Von Recklinghausen's disease → aka neurofibromatosis I
 - D • Lynch syndrome / HNPCC → high risk colorectal ca & endometrial, ovary, stomach, CI, hepatobiliary, upper GIT, brain and skin.
 - E • Peutz-Jegher's syndrome → intestinal hamartomatous polyps with skin deposition of melanin
- B 30. Renal cell carcinoma ^{VHL}
 - ? C 31. Increased risk of soft tissue sarcoma ^{Lynch}
 - D 32. Increased risk of colon cancer and endometrial cancer ^{Lynch syndrome}
 - A 33. Lymphangiosarcoma associated with lymphoedema following radical mastectomy ^{Stewart Treves}
 - C 34. Neurofibromatosis type I → Von Recklinghausen's disease

35. With regard to the storage of banked blood, which of the following statement is true?

- A. Packed red blood cells stored in additive solution (AS-3) and kept at 4°C are suitable for transfusion for 3 months. †
- B. Platelets in blanked blood retain their function for 3 days. †
- C. Factor II, VII IX and XI are stable at 4°C †
- D. A decrease in red blood storage cell oxygen affinity occurs during storage as a result of a decrease in 2, 3-diphosphoglycerate (2,3-DPG) levels.
- E. There is a significant rate of hemolysis in stored blood.

36. In cirrhotic patient who are actively bleeding, the coagulopathy of end-stage liver disease can be differentiated from DIC most readily by estimation of which of the following factors?

- A. Factor II
- B. Factor V
- C. Factor VII
- D. Factor VIII:C
- E. Factor X

CHD or ↑ FVIII & FII
↓ FVIII, + fibrinogen (CFI) & ↑ D-dimer
Thrombin time (F2)
Liver dx: (N)
DIC: prolonged

37. Which of the following statements regarding the distribution, composition, and osmolarity of the body fluid compartments is not true?

- A. Most intracellular water resides in skeletal muscles.
- B. The principal intracellular cation is sodium. $K^+ \overset{\text{extra}}{K}$
- C. Nonpermeable proteins determine the effective osmotic pressure between the interstitial and intravascular (plasma) fluid compartments.
- D. Calcium greatly determines the effective osmotic pressure between the ICF and ECF
- E. The principal extracellular anion are chloride and bicarbonate.

38. Which one of the following is not a stimulus for ECF expansion?

- A. Hemorrhage leading to a reduction in blood volume
- B. Increased capillary permeability after major surgery
- C. Peripheral arterial vasoconstriction
- D. Negative interstitial fluid hydrostatic pressure
- E. Colloid oncotic pressure

39. Which of the following statements regarding hypervolemia in postoperative patients is not true?

- A. Hypervolemia can be reduced by the administration of isotonic salt solutions in amounts that exceed the loss of the volume.
- B. Acute overexpansion of the ECF space is usually well tolerated in healthy individuals
- C. Avoidance of volume excess requires daily monitoring of intake and output and determinations of serum sodium concentrations to guide accurate fluid administration.
- D. The most reliable sign of volume excess is peripheral edema
- E. The earliest sign of volume excess is weight gain.

40. Which of the following pairing statements regarding daily fluid balance is incorrect?

- A. Daily water intake, 2000 to 2500 mL
- B. Average stool loss, 1000 mL - 300 mL
- C. Average insensible loss, 600 mL
- D. Average urine volume, 800 to 1500 mL
- E. Average increase in insensible loss in a febrile patient, 250 mL/day for each degree of fever.

41. With regard to intraoperative management of fluids, which of the following statements is true?

- A. In a healthy person, up to 500mL of blood loss may be well tolerated without the need for the blood replacement
- B. During an operation, functional ECF volume is directly to the volume lost to suction.
- C. Functional ECF losses should be replaced with plasma
- D. Administration of albumin plays an important role in the replacement of functional ECF volume loss.
- E. Operative blood loss is usually overestimated by the surgeon.

42. A 70-year-old man with sepsis has a pH of 7.18. Which of the following statements is true regarding his metabolic acidosis?

- A. Tissue hypoxia leads to increased oxidative metabolism.
- B. Acute compensation for metabolic acidosis is primarily renal.
- C. Metabolic acidosis results from the loss of bicarbonate or the gain of fixed acids
- D. The most common cause of excess acid is prolonged nasogastric suction. X
- E. Restoration of blood pressure with vasopressors corrects the metabolic acidosis associated with circulatory failure.

43. Which of the following is true with regard to the metabolic response to stress as described by Cuthbertson:

- A. The flow phase of Cuthbertson's two-phase model of the metabolic response to injury is characterized by physiologic responses designed to restore tissue perfusion and circulating volume.
- B. The ebb phase begins once the patient is successfully resuscitated.
- C. The ebb phase entails both a catabolic and an anabolic period.
- D. The flow phase occurs initially after traumatic injury.
- E. The anabolic phase starts after wounds have closed and is characterized by the return of normal homeostasis

44. Which of the following cases is considered a dirty wound?

- A. Open cholecystectomy for cholelithiasis
- B. Hemiorrhaphy with mesh repair
- C. Open prostatectomy
- D. Appendectomy with walled-off abscess
- E. Thyroidectomy

45. Acute haemolytic transfusion reaction is associated with:-

- A. ABO incompatibility
- B. Minor blood group incompatibility
- C. Rh incompatibility
- D. Transfusion through Ringer's lactate
- E. Transfusion through 5% dextrose and water

46. A patient with a non-obstructing carcinoma of the sigmoid colon is being prepared for elective resection. To minimize the risk of postoperative infectious complications, your planning should include:-

- A. A single pre-operative parenteral dose of antibiotic effective against aerobes and anaerobes
- B. Avoidance of oral antibiotics to prevent emergence of *Clostridium difficile*
- C. Parenteral nutrition
- D. Postoperative administration for 5-7 days of parenteral antibiotics effective against aerobes and anaerobes *W*
- E. Operative time less than 5 hrs

47. The most important effect of pre-operative potassium iodide solution in thyroid surgery is:

- A. A reduction in thyroid storm
- B. Reduced vascularity of the gland *B inhibits growth of thyroid hormones*
- C. Increased chance of saving the parathyroid glands
- D. Reduced risk of recurrent laryngeal nerve damage
- E. Pigment deposition in the parathyroid gland which helps to identify them

48. Phosphate containing solutions for bowel preparation for colonoscopy are contraindicated in the elderly because of the risk of:

- A. Hypokalaemia
- B. Hypercalcaemia
- C. Large fluid shifts
- D. Nausea and vomiting
- E. Bloating

49. Severe and complicated pancreatitis is associated with all of the following EXCEPT:

- A. Adult Respiratory Distress Syndrome ✓
- B. Hyperglycaemia ✓
- C. Ascites ✓
- D. Hypocalcaemia ✓
- E. Gout

50. In inflammatory bowel disease, which extra-gastrointestinal manifestation is more likely in a patient with ulcerative colitis than one with Crohn's disease?

- A. Uveitis - CD
- B. Renal stones - CD
- C. Gallstones - CD
- D. Venous thrombosis
- E. Erythema nodosum - CD

* UC - mucosal disease

- colon
- continuous inflam.
- endobuccal lining

* CD - chronic full thickness inflammatory process that can spread

- any part of GIT
- patchy inflam. skip areas
- 2 major types based on extent
- more commonly causes stricture & fistulation
- also risk for colorectal Ca.

- ILM, 1st part - 20-40, 2nd part - 70% ; Caecum

* Extraintestinal manifestations of Crohn's

- Erythema nodosum
- Pyoderma gangrenosum
- Arthropathy
- Eye complications (iritis/uveitis)
- Aphthous ulcers
- Gall stones
- Renal stones
- Prolonged cholangitis
- Chronic renal impairment
- Spondylitis

51. With regard to MEN IIA (Sipple syndrome)

A. Pheochromocytoma will 20% of cases X 50%

90-100% B. Medullary thyroid carcinoma will be present all the time X 20-50%

C. Parathyroid over activity will be present 60% of cases 5-20%

D. Parathyroid tumours will be present all the time ✓

~~E. Most of the time pheochromocytoma will be bilateral X 10-50% Bilateral~~

52. With regard to risk of breast tumour, all the following syndromes carry genetic risk of the disease EXCEPT:

A. Women with Li-Fraumeni syndrome are at risk ✓

B. Men with Cowden syndrome are at risk ✓

C. Muir-Torre syndrome, ✓

~~D. Sipple syndrome, (MEN IIA RAD) MEN IIA~~

E. Ataxia-telangiectasia ✓

53. Which of the following is true with regard to hernia?

~~F. A. It is impossible to differential femoral from inguinal hernia clinically.~~

~~F. B. It is impossible to differentiate indirect from direct hernia clinically~~

~~F. C. Ultrasound is always the investigation of choice before diagnosis of hernia~~

D. Hernia is the commonest cause of intestinal obstruction in developed countries

Post-operative adhesion

~~✓ E. Saphena varix is a differential diagnosis of groin hernia.~~

54. Assessment of a breast lump include all of the following EXCEPT

✓ A. Clinical examination ✓

✓ B. Mammography

✓ C. Core biopsy ✓

✓ D. Ultrasonography

~~✓ E. Mastectomy~~

Tuple assessment

55. Which of the following conditions is associated with an isolated prothrombin time (PT) prolongation?

A. von Willebrand disease

B. Factor VIII deficiency (hemophilia A)

C. Common pathway factor deficiencies (factors II, V, and X and fibrinogen)

~~✓ D. Therapeutic anticoagulation with warfarin (Coumadin)~~

E. Therapeutic anticoagulation with heparin

2, 7, 9, 10

- DTA - 2
60

USE THE FOLLOWING INFORMATION FOR QUESTIONS 56-60. A two year old boy presents in hospital having been run over by his father when he was reversing in the driveway. He is found to be drifting in and out of consciousness, blood pressure of 50/35mmHg, pulse of 120 beats per minute and capillary refill of 4 seconds.

56. What will be the initial management? A B C D E
- A. Put a large bore intravenous cannula and start saline boluses
 - B. Take to theatre for exploration x
 - C. Give oxygen
 - D. Immobilise any fractured bones to prevent further bleeding x
 - E. Secure the airway.

57. In giving saline boluses, the recommended initial dose is 20 x 20 = 1.4 L
- A. 20ml/kg body weight
 - B. 10ml/kg
 - C. 100ml
 - D. 1L
 - E. 50ml/kg

58. Which of the following test is NOT recommended initially to evaluate for the presence of intraabdominal traumas in such a child
- A. Abdominal CT scan ✓
 - B. Liver function tests
 - C. Urinalysis
 - D. Serum amylase
 - E. Abdominal FAST scan ✓

59. The child is found to stabilise but have splenic laceration. Which is the best management option? - splenic lacer
- A. Urgent operation and splenectomy
 - B. Bed rest
 - C. Discharge for observation at home
 - D. Blood transfusion
 - E. Anticoagulants

60. In resuscitating a child, the following is the recommended chest compression:breath ratio 15 1

- A. 15:2
- B. 15:1
- C. 30:2
- D. 30:1 x
- E. 5:1

61. A six week infant is brought to hospital with projectile nonbilious vomiting. The doctor orders an ultrasound scan and confirms presence of pyloric stenosis. He then orders some laboratory tests. The following are possible findings EXCEPT

- A. Acidosis
- B. Alkalosis
- C. Hypochloraemia
- D. Hyponatraemia
- E. Hypokalaemia

Vomiting = ↓ electrolytes
 = ↓ acid

62. A 12 year old girl complains of abdominal pain that started suddenly in the morning and has persisted 4 hours since. She is also vomiting and has not had any diarrhoea. She reports no change in appetite or dysuria. She is not febrile but is tender in suprapubic and left iliac fossa, and the tenderness is not migratory. Laboratory tests are ordered and white blood cell count is 8 and a CRP of 4. What is the most likely diagnosis?

- A. Appendicitis ✗
- B. Ovarian torsion ✗
- C. Merkel's diverticulitis
- D. Constipation
- E. Mesenteric adenitis

→ obstruction that occurs in absence of mechanical cause or acute intra-abdominal dx.

63. Colonic pseudo obstruction is caused by all except

- A. Systemic illness
- B. Electrolyte imbalance
- F C. Faecal impaction ✓ dx
- D. Opioids ✓
- E. Hypothyroidism ✓

Metabolic - DM, hypok⁺, uremia, organemia
 ESR & trauma
 Suck - burn, MI, sepsis, postop
 Retropelvic vessel entrapment - w/ blood, urine, sigmoid, tumor
 Drugs - TCAs, phenothiazines, barbiturates
 2° GIT involvement - colitis, chagias etc

64. An 18 year old girl is brought to the casualty with worsening severe abdominal pain which started 6 hours ago. Her abdomen is tender particularly in the lower abdomen and there is guarding. She also has a history of Chlamydia. She has tachycardic but her blood pressure is normal at 137/78. Which one of the following is the diagnosis you should confirm or rule out in this patient?

- A. Acute appendicitis
- B. Pelvic inflammatory disease
- C. Acute intestinal obstruction ✗
- D. An ectopic pregnancy ✗
- E. Crohn's disease ✗

65. Which of the following is INCORRECT concerning colorectal carcinoma?

- A. Is the second most cause of cancer related death in western world?
- B. A T1 N1 M0 stage III is equivalent to Duke stage C tumour
 → LNE involved
- C. Majority of the cancers occur in the descending colon
 → 49% tumours of the left side MC
- D. Familial adenosis polyposis and HNPCC are two inherited causes of colon cancer
- E. Patient with primary Sclerosing cholangitis and ulcerative colitis have increased risk of developing colon cancer
 *→ morbidity 17% risk at 10yrs
16-18% risk at 20yrs
20% at 30yrs*

66. Which ONE of the following is INCORRECT with regard to familial adenomatous polyposis.

- A. Account for about 1% of colorectal cancers
 < 1% - accounts for 1% of all colon Ca
- B. Is autosomal dominant inherited
 but not for colorectal Ca is 100%
- C. Patient may develop extra colonic manifestation such as desmoids, epidermoid cysts and dental cysts.
 ✓
- D. Adenomas develop during teenage years of life will become malignant around the age of 20
 *→ develop at age 15, Ca colon occurs 10-20yrs after onset of the polyps
Age 25-35*
- E. Treatment is with a subtotal colectomy
 *colectomy w/ ileorectal anastomosis
Proctocolectomy w/ ileoanal anastomosis*

67. All are important in the preoperative management of patients with jaundice except

- A. Vitamin K
 ✓
- B. Adequate hydration
 ✓
- C. Input-Output charts
 ✓
- D. Prophylactic antibiotics
 ✓
- E. Scrubbing of the surgical site in the ward

68. All are complications of cholelithiasis except

- A. Cholangitis
 ✓
 - B. Pancreatitis
 ✓
 - C. Gall bladder abscess
 ✓
 - D. Duodenal ulcers
 - E. Recurrent cholecystitis
 ✓
- 1) Biliary colic
2) acute cholecystitis
3) Empyema / abscess of gall bladder
4) mucocele
5) Peric
6) Biliary atresia
7) Acute cholangitis
8) " pancre
9) Ind obstr (gallstone ileus)*

*aden = 32%
Sigmoid = 21%
Descending = 13%*

69. Carcinoma of the bladder:

- A. Is primarily of squamous cell origin. ~~X~~ TCC
- ~~B. Is preferentially treated by radiation.~~
- ~~C. May be treated conservatively by use of intravesical agents even if it invades the bladder muscle.~~ X
- D. May mimic an acute UTI with irritability and hematuria. Painless
- E. Is preferentially treated by partial cystectomy. ~~X~~ ✓

70. If torsion of the testicle is suspected, surgical exploration:

- A. Can be delayed 24 hours and limited to the affected side.
- B. Can be delayed but should include the asymptomatic side.
- C. Should be immediate and limited to the affected side.
- D. Should be immediate and include the asymptomatic side

71. A 22 year old female patient presents five days after laparoscopic appendicectomy with fever and a rectal mass. What is the most likely diagnosis?

- A. Ruptured ectopic pregnancy ~~X~~
- B. Ischiorectal abscess
- C. Pelvic abscess
- D. Ovarian cyst ~~X~~
- E. Uterine fibroids ~~X~~

72. The following investigations are appropriate prior to surgery

- A. An ECG in all patients older than 30 years ~~X~~
- ~~B. Coagulation screen for all patients with obstructive jaundice~~ X
- C. HIV screening for patients with acute appendicitis ~~X~~
- D. Chest X-ray for all patients over 40 years
- E. Liver function test for patients with acute appendicitis

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 73-77. CHOOSE THE MOST APPROPRIATE CHOICE FOR EACH STEM

- A. Familial adenomatous polyposis syndrome (73)
- B. BRCA mutation
- C. Down's Syndrome
- D. MEN IIA
- E. Long-term immunosuppressive treatment after kidney transplant

- A 73. 100% lifetime risk of colon cancer **A**
- 74. Increased risk of periampullary tumours **- A A**
- B 75. Increased risk of bilateral breast cancer **B B**
- D 76. Increased risk of phaeochromocytoma **D**
- E 77. Increased risk of Kaposi's sarcoma **E**

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 78-82. CHOOSE THE MOST APPROPRIATE CHOICE FOR EACH STEM.

- A. Left hemicolectomy - Desc colon & sigmoid caec
- B. Anterior resection - ^{upto} 5cm from anal verge - permanent colostomy due to loss of sphincter
- C. Diverting ileostomy
- D. Abdominoperineal resection
- E. Right hemicolectomy - Ca caecum & asc. colon

- B B 78. Rectal cancer 3 cm from the anal verge - ^{Excluded R2 hemicolectomy} - Ca trans colon & splenic flexure
- A 79. Colon cancer at the rectosigmoid junction
- C 80. Descending colon perforation at colonoscopy
- D 81. Consent for a permanent colostomy
- E E 82. Hepatic flexure tumour **trans colon**


USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 83-87. CHOOSE THE MOST APPROPRIATE CHOICE FOR EACH STEM.

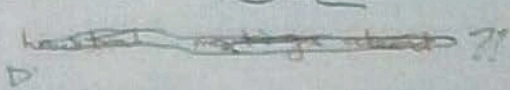
- A. Distended small bowel identifiable by the valvulae conniventes ✓
- B. Coffee bean sign *- sigmoid volvulus ; kidney bean sign - caecal volvulus*
- C. Modest amount of gas in the pelvis. ✓
- D. Peripheral, rather than central, distribution of gas.
- E. Prominent haustral markings ✓

83. Intussusceptions *B A* C*

B 84. Sigmoid volvulus *D B B*

A 85. Small bowel obstruction *A A A*

86. "Closed-loop" obstruction *C E D* 

E 87. Obstructing rectal cancer *E - ~~lateral rectal cancer~~ D* 

88. Rectal Juvenile polyps:

- A. Almost invariably undergo malignant change
- B. Occasionally persist into adult life
- C. Are pre-malignant
- D. Are not associated with pain
- E. Are not associated with rectal bleeding

89. Which statement with regards to breast cancer is ^{False} TRUE? *The*

- A. The commonest site of metastases is the contralateral breast X
- B. Local spread to the chest wall occurs earlier in female patients than male patients X
- C. Klinefelter's syndrome is a predisposing factor X *XX Gynecomastia*
- D. Inflammatory breast cancer is classified as locally advanced disease ✓
- E. There is no role for neo-adjuvant chemotherapy X ✓

90. Preservation of normothermia in surgical patients is important. All of the following are negative outcomes associated with perioperative hypothermia except?

- A. Coagulopathy ✓
- B. Wound infection ✓
- C. Nosocomial pneumonia
- D. Myocardial ischaemia
- E. Delayed wound healing

91. Which of the following is NOT a complication of urethral stricture?

- A. Retention of urine ✓
- B. Urethral diverticulum ✓
- C. Peyronie's disease
- D. Peri-urethral abscess ✓
- E. Urethral fistula ✓

92. Which of the following people can give a valid consent for elective surgery?

- A. A surgeon not involved in care of the patient ✗
- B. The headmaster of a child in boarding school ✗
- C. A patient who is under the influence of alcohol ✗
- D. A magistrate for a minor whose parents decline life-saving surgery
- E. A 14-year old ✗

93. Kaposi's sarcoma:

- A. Is an X-linked recessive disease
- B. Can be treated with radiotherapy ✓
- C. Does not respond to chemotherapy
- D. Only affects people with AIDS
- E. Mainly affects the central nervous system *Mucosal*

94. Regarding gastric carcinoma

- A. H. pylori is not known to be a risk factor ✗
- B. Early gastric cancer is , even in the presence of nodal involvement have 90% 5 year survival *confined to the mucosa & submucosa and depends on nodal invo, serosa*
- Intestinal* C. Diffuse type in Lauren's classification have the best prognosis ✗ *intestinal*
- D. Troisier's sign is due to transperitoneal spread ✗ *thoracic due to supraclavicular lymph nodes*
- E. Sister Mary Joseph nodule is due to lymphatic spread *periumbilical / transperitoneal*

95. Regarding preoperative evaluation

- A. There is no role for history and physical examination ✗
- B. Chest x ray is useful in all circumstances ✗
- C. Usefulness of hemogram is to avoid blood loss ✗
- D. Post operative complications are a consideration
- E. Comorbidities are an occasional consideration ✗

96. The following are methods of managing Inguinal hernia except

- A. McVays method ✓
- B. Bassini's method ✓ *No longer used*
- C. Lichtensteins method ✓
- D. Lockwood
- E. Shouldice method ✓

97. A postoperative pulmonary embolus

- A. Is invariably associated with chest pain ~~X~~
- B. A chest x-ray is always normal ~~X~~
- C. Diagnosis can be confirmed by radioisotope ventilation/perfusion scan ✓ ~~6~~
- ~~D~~ ECG may show Q wave in lead III. ✓ ✓ S₁ Q₃ T₃ S₁Q₃T₃
- E. is rarely seen between 7 and 10 days after operation ~~X~~

most commonly

98. Phylloides tumour

↑
smc

- A. Is invariably a benign disease
- B. Modified radical mastectomy is the treatment of choice ~~X~~
- C. Commonly affect ages 20-30 years just like fibroadenoma
- D. Chemotherapy may not be useful ~~X~~
- E. Local recurrence are common than distance metastasis

99. Enterocutaneous fistula

- A. Always close spontaneously ~~X~~ ~~X~~
- B. 250ml discharge from the fistula per day is considered low out put ~~X~~ ~~mod~~ ~~←~~ ~~Severe~~
- C. Conventional therapy is surgery for the first phase ~~Resuscitate~~
- ~~D~~ Spontaneous causes include intestinal sepsis ~~←~~ ~~2cm - up to 1cm~~
~~72hr - u - 2cm~~
- E. Fistulas with tracts longer than 2cm hardly closes ~~X~~

A - asymm

B - Border

C - colour

D - Diam - 6mm

E - evolution

100. Which of the following is true regarding malignant melanoma

- ~~F~~ A. The most common type is nodular melanoma ~~X~~ ~~supr spreading~~
- ~~F~~ B. Breslow thickness is not a good prognostic factor ~~X~~ ~~extent~~
- ~~F~~ C. Sentinel lymph node biopsy is not a means of assessing lymph node status in this disease ~~X~~
- D. Isolated limb perfusion with cytotoxic agents palliates recurrent limb disease
- ~~F~~ E. Lentigo maligna is deep disease ~~→~~ ~~↑~~

good prognosis ↑
superficial dx

↑
transit metastases
irrescutable local dx
palliation to maintain limb dx
adjuvant therapy →
poor prognostic times

Acral lentiginous
occurs in site

The following may characterize chronic urine retention.

- T Dribbling of urine
- F Nocturia
- Stress incontinence ?
- F Severe suprapubic pain ✓ bull
- T Suprapubic mass

2. Ulcers

- F The base of an ulcer is assessed by inspection.
- F Tuberculous ulcers often have raised edges. (under - 11 gastric/neoplas)
- T Venous ulcers (varicose ulcers) have shallow edges
- F Should always be skin grafted (only for some specific ones)
- F Daily dressing is required in all types of ulcers.

3. True about a sinus

- F Defined as an abnormal communication between two epithelial surfaces. (Hitchcock)
- T May be a complication of an abscess ✓
- T May be associated with presence of foreign bodies ✓
- T May be congenital ✓
- F All of the above X

4. Cysts

- F Are always congenital X X
- T May be transillumination positive ✓
- T Are usually lined by epithelium or endothelium ✓
- T Fluctuation is an unreliable clinical test in cysts of less than 2cm diameter. ✓
- F All of the above X X

5. Indirect inguinal hernia

- F Leaves the abdominal cavity medial to inferior epigastric artery through Hasselback's triangle. Lateral
- T Traverses the inguinal canal ✓
- T Its coverings are the same as those of spermatic cord X X
- T The sac lies anteromedial to the vas deferens and other structures in the cord X
- F All of the above

6. Strangulated hernia

- T Femoral herniae are prone to it ✓
- T There is risk of developing peritonitis ✓
- F Recognized when cough impulse is lost in an irreducible hernia ✓
- T Hernia is tense, tender with red shiny overlying skin ✓
- F All the above

7. In lower extremity chronic arterial insufficiency symptomatology may include:

- T Muscle pain precipitated by exercise but relieved by rest
- F Limb rest pain usually relieved by limb elevation
- T Paraesthesia
- F Nail deformity
- T Ulcers

↑ve claudication²

100
25
24 = 100

SURG

- ✓ 8. Which of the following is true about total body water
- ~~a) T~~ 1/3 of body water is within extracellular compartment
 - b) ~~F~~ Daily water requirement within the body is 1 ml/kg/hr \rightarrow 2.4L/d.
 - c) ~~F~~ Insensible water loss in the tropics in a 70 kg weight person is about 500mls
 - d) ~~F~~ In a child the total body water accounts for 75% of the weight due to increase in intracellular fluid.
 - e) ~~T~~ Severe diarrhoea leads to significant loss of potassium and bicarbonate

- ✓ 9. Gangrene
- a) ~~T~~ Implies death and putrefaction of macroscopic portions of tissue
 - b) ~~T~~ Sudden arterial occlusion may result in wet gangrene with blister formation
 - c) ~~T~~ Crepitus in the tissues is an important clinical sign implying gas gangrene
 - d) ~~T~~ Zone of demarcation is a result of granulation tissue forming between the dead and living parts.
 - e) ~~F~~ A line of demarcation should be awaited before amputation in all cases ~~F~~

- ✓ 10. Hypokalaemia in the surgical patient
- a) ~~T~~ May be caused by upper GI obstruction ✓
 - b) ~~T~~ May be a complication of entero-cutaneous fistula ✓
 - c) ~~T~~ Is worsened by alkalosis ✓ ✓
 - d) ~~T~~ May be a cause of paralytic ileus ✓
 - e) ~~T~~ Should be treated by oral potassium supplementation ✓

- ✓ 11. Dysphagia
- a) ~~F~~ Is defined as painful swallowing ✓ \rightarrow odynophagia
 - b) ~~F~~ Is usually experienced for several years before presentation in patients with Ca oesophagus ✓
 - c) ~~F~~ A pharyngeal pouch is not a cause ✓
 - d) ~~F~~ Endoscopy is done mainly to grade the dysphagia ✓ (thickening) clinical.
 - e) ~~F~~ Cardiomegaly caused by ventricular enlargement is a known cause ✓ \rightarrow pericardial effusion

- ✓ 12. Cancer of the oesoph. \uparrow
- a) ~~F~~ Tylosis reduces risk - form of callus on the skin
 - b) ~~F~~ Majority are adenocarcinomas \times SCC
 - c) ~~F~~ Development of oesophagobronchial fistula is an indication for urgent surgical resection.
 - d) ~~T~~ Surgical resection may be the preferred treatment option in most cases
 - e) ~~T~~ Is common in communities of low socio-economic status.

- ✓ 13. In acute appendicitis \rightarrow periumbilical
- a) ~~F~~ The initial pain is usually felt over MacBurney's point (Right iliac fossa) \rightarrow RLQ
 - b) ~~F~~ Fever is an uncommon finding ✓
 - c) ~~F~~ Muscle rigidity, percussion tenderness and rebound tenderness are usually negative ✓
 - d) ~~F~~ Leucocytosis of about 15,000 cells μ l is a common finding \rightarrow 10,500 cells μ l
 - e) ~~T~~ Palpation of the left iliac fossa may generate pain in the right iliac fossa \rightarrow Rovsing's

- ✓ 14. Clinical features associated with intestinal obstruction are
- ~~T~~ ~~T~~ Abdominal distention ✓
 - ~~T~~ ~~T~~ Constipation ✓
 - ~~T~~ ~~T~~ Vomiting ✓
 - ~~T~~ ~~T~~ Increased bowel sounds \rightarrow \downarrow

Acute

3

30 ml/kg/d
2500
1.5L

Reduced or absent bowels sounds - *Reitman's*

✓ Routine pre-operative preparation of all surgical patients should include

- a) Administration of intravenous fluids ✓
- b) Assessing fitness for surgery and anaesthesia by careful testing and physical examination
- c) Administration of prophylactic antibiotics ✗
- d) Performing pulmonary function test
- e) Discussion with the patient/or relatives about the surgery and obtaining informed consent

16. ✓ In patients being prepared for surgery

- a) A minimum haemoglobin of 12.5 g/dl is recommended 10 10
- b) A routine chest xray is recommended in elderly patients, smokers and those with primary malignancies elsewhere.
- c) Oral anticoagulants should be stopped one day before surgery ✗ F
- d) An ECG is recommended in those over 40 years old ✗ F
- e) Premedication is mainly given to reduce anxiety and raise the pain threshold

17. ✓ About post operative care of a patient

- a) F The first 24 hours should always be in the intensive care unit where possible ✗
- b) T Is mainly about careful monitoring of the patient in order to identify early any physiological derangements and provision of adequate pain relief
- c) F The central venous pressure (CVP) is the only guide to a patient's fluid volume status and should be monitored in all patients.
- d) F Urine output should be more than 2ml/kg/hour for adults to avoid renal failure 730ml / 1/2 ml/kg
- e) F All drains must be removed within 24 hrs. ✗

18. ✓ In post operative pain relief

- a) F Standard doses are recommended for all patients to avoid over dosage ✗
- b) T Inadequate relief of pain may predispose to thrombo-embolism ✓
- c) T Opiates can usually be combined with non-steroidal anti-inflammatory agents for better pain relief.
- d) - Intravenous, intramuscular, local blocks, inhalation and oral routes can all be used in post operative analgesia
- e) F All the above ✗

19. ✓ In the postoperative period

- a) T Bleeding may be a complication of over transfusion - Thrombocytopenia
- b) F Infection is usually systemic and presents as septicaemia ✗
- c) F Confusion in an elderly person is usually due to a cerebrovascular incident ✗
- d) T Fever may be a sign of atelectasis ✓
- e) Patients with preoperative jaundice are likely to develop renal failure

20. ✓ The following is true of cellulitis

- a) T Spreading inflammation of subcutaneous and subfacial planes
- b) F Pot's puffy tumour of scalp is an example
- c) T Ludwig's angina of sub maxillary region can be a presentation
- d) F The commonest organisms is the streptococcal pneumoniae - *Strep pneumoniae*
- e) T Glotticaedema with respiratory obstruct ca. could be a complication of Ludwig's angina

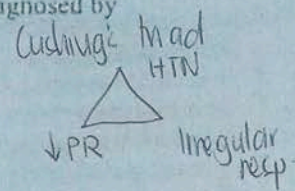
4
— 1.4 L / 70kg / 24hr
0.02 L / kg / 24hr
100 OKP
70 7
20ml / kg / 24hr
20 7 ml

21. ✓ The signs and symptoms of perforated duodenal ulcer include

- ~~T~~ A. Sudden onset severe abdominal pain ✓
- ~~T~~ B. Board like rigidity ✓
- ~~T~~ C. Pneumoperitoneum ✓
- ~~T~~ D. Severe haematemesis X
- c) F Diarrhea X

22. Rising intracranial tension in a patient with head injury is diagnosed by

- ~~T~~ A. Decrease in level of consciousness
- ~~T~~ B. Slowing of the pulse
- c) T Rising blood pressure ✓
- d) T Cardiac arrhythmias ✓
- ~~T~~ E. Vomiting



23. Which of the following statements about open fractures is/are correct?

- T T A. Intravenous antibiotics should be administered as soon as possible. ✓
- T T B. They should be regarded as an emergency. ✓
- F T C. Wound closure is necessary within 8 hours. F
- T T D. Systematic wound debridement and irrigation should be performed.
- F F E. They most often result from low-energy injuries. High

24. The goals of proper fracture reduction include which of the following?

- T T A. Providing patient comfort and analgesia. ✓
- T T B. Allowing for restoration of length of the extremity. ✓
- T T C. Correcting angular deformity and rotation. ✓
- F F D. Enabling immediate motion of all fractured extremities. X
- T T E. Providing a foundation for bone healing and union. ✓

25. The radial nerve is at greatest risk for injury with which fracture?

- F A. Fracture of the surgical neck of the humerus - Axillary nerve
- T B. Fracture of the shaft of the humerus (middle 1/3) - radial nerve ✓
- F C. Fracture of the head of the radius.
- F D. Olecranon fractures. ulnar nerve
- F E. Fracture of the distal radius.

26. The most reliable sign of compartment syndrome in the hand includes:

- T T A. Pain with passive stretch of the digits. ✓
- F B. Absent of radial pulse
- F C. Motor paralysis
- F D. Swelling of the digits.
- F E. Stiffness of the digit.

27. Which of the following statements with regards to fractures in children compared to those in adults is/are true

- F F A. Nonunion is more common. F
- F F B. Compound fractures are more common F
- F T C. More angulation and shortening may be acceptable. T
- F D. Long bone shaft fractures more often require open reduction F
- F E. Fractures of neck of femur is more common in children. F

28. A 5-year old child presents with a 2-day history of the atraumatic onset of pain, erythema and swelling of the right knee joint. The child is febrile with an elevated white blood cell count. The differential diagnosis includes:

- T A. ~~T~~ Acute rheumatic fever ✓
- F B. ~~T~~ Leukemia ✓
- F C. ~~T~~ Gout ✓
- T D. ~~T~~ Acute septic arthritis ✓
- F E. ~~F~~ Osteoarthritis ✓

29. Complications of hip dislocation include which of the following

- ~~T~~ T Sciatic nerve injury ✓
- ~~T~~ T Avascular necrosis ✓
- ~~T~~ T Degenerative arthritis ✓
- D. F Compartment syndrome ✓
- E. T Inferior gluteal artery injury ✓ *superior*

30. Regarding osteomyelitis

- ~~T~~ T Is most commonly due to a staphylococcus aureus infection.
- ~~T~~ T Can be due to salmonella infection in patients with sickle cell anaemia.
- ~~T~~ T Infection usually involves the metaphysis of long bones.
- F D. F Dead bone within the medullary canal is known as the involucrum. *sequestrum*
- F E. F New bone forming beneath the periosteum is known as the sequestrum. *involucrum*

31. Regarding eponymous fractures

- A. F Bennett's fractures involves the distal ulna - *base of the 1st metacarpal bone*
- ~~T~~ T Colle's fracture involves the distal radius.
- C. F Galeazzi's fracture involves the radial shaft and dislocation of the proximal radioulnar joint. *distal shaft*
- D. T Monteggia's fracture involves the proximal ulna and anterior dislocation of the head of the radius.
- E. F Pott's fracture is a general term applied to fractures around the knee. - *Ankle*

Regarding osteosarcomas

- ~~F~~ A. T Affects the epiphyses of long bones *Metaphyses*
- ~~T~~ T Are most commonly seen around the knee and in the proximal humerus.
- ~~T~~ T Haematogenous spread can result in pulmonary metastases.
- D. T Is exclusively a disease of adolescence and early adult life. *children adolescents*
- ~~T~~ T X-ray shows a 'sunburst' appearance due to soft tissue involvement. *codman's triangle*

33. Which of the following injuries is/are associated with serious risk of vascular injury

- ~~T~~ T Supracondylar fracture of the humerus ✓
- ~~F~~ F Supracondylar fracture of the femur ✓
- F C. F Olecranon fracture
- F D. F Ankle fracture.
- F E. F Colles fracture.

34. in examination of the lower limbs

- ~~T~~ T Apparent shortening is measured from the umbilicus. *Xiphisternum*
- B. True shortening is measured from the xiphisternum. *F*
- C. True shortening is measured from the pubic symphysis. *F*
- D. Apparent shortening is measured after one evaluates true shortening.

42. When pain persists after close reduction and casting the immediate concern should be
- A. Inadequate immobilization.
 - B. Neural injury
 - C. Muscle spasm
 - D. Pressure point necrosis
 - E. Ischaemia
43. In carpal tunnel syndrome:
- F A. The tingling is over the ulnar side ^{Radial} (marked 3, 4, 5)
 - F B. Surgery is not helpful
 - F C. Rheumatoid Arthritis is not a predisposing factor
 - T D. Pain is usually at night
 - T E. May be predisposed by pregnancy
44. Common paediatric fractures include:
- X A. Greenstick fracture
 - B. Fractures of the neck of the femur
 - C. Fractures of the spine
 - X D. supracondylar fracture of the humerus ^{Gaillard}
 - E. Fracture of the distal radius.
45. Patients with spinal injury may complicate with:
- X A. Contractures ^{Disuse}
 - X B. Urinary tract infections
 - X C. Constipation
 - D. Low pulse and low blood pressure
 - X E. Muscular spasms
46. A fracture is said to be
- F A. Closed if an overlying skin laceration has been sutured.
 - X B. Open if it communicates with the outside environment.
 - X C. Complicated if there has been associated damage to nerves and vessels.
 - F D. A fatigue fracture if it occurs through diseased bone. ^{Pathological.}
 - X E. Pathological if it occurs through bone metastasis
47. Concerning injuries of the hip
- A. Fractures of the femoral neck are common in the young & old
 - B. Anterior dislocation is more common than posterior ^{Post}
 - X C. Posterior dislocation of the limb is short and internally rotated.
 - X D. In fracture neck of the femur the limb is shortened and externally rotated
 - X E. Dislocation of the hip should be reduced as a matter of emergency
48. Shoulder pain may be caused by which of the following entities
- X A. Spinal arthritis
 - B. Lung cancer.
 - C. Umbilical hernia
 - D. Diaphragmatic irritation

~~E.~~ T Agina

49. In fracture of the mid shaft of the femur the - flexed & ext rotated
- ~~A.~~ T Proximal fragment is usually flexed - Prox 1/3
 - ~~B.~~ T Proximal fragment is usually abducted
 - C. F Distal fragment is usually abducted v adduct
 - D. F Common femoral vessels are usually damaged.
 - E. F Femoral nerve is often damaged.
50. Which of the following organisms are commonly found in pyogenic arthritis
- ~~A.~~ T E.Coli
 - ~~B.~~ T S. aureus MCC
 - ~~C.~~ T H. Influenzae
 - E. T Haemolytic streptococcus
 - F. T P. vulgaris
51. Acute retention of urine in a 50 year old man could be due to
- ~~A.~~ T Urethral stricture
 - ~~B.~~ T Benign Prostatic Enlargement
 - C. F Kidney malignancy
 - ~~D.~~ T Road traffic accident resulting in fracture pelvis
 - ~~E.~~ T Bladder calculi
52. In head injury with fracture (base) of skull
- A. F Clinical evaluation may be unhelpful and x-rays are usually required to make a diagnosis.
 - B. T Pneumatocele in the subdural space may occur x Depth depressed skull #
 - ~~C.~~ T Subconjunctival haemorrhage is a useful sign
 - ~~D.~~ T CSF rhinorrhoea may occur
 - E. F CSF through the auditory meatus is a sign of posterior forsa fracture x (middle)
53. According to the 'rule of 9' the area of skin of the head and neck is what per cent of the total skin surface area in an adult?
- ~~A.~~ T 9%
 - B. F 18%
 - C. F 27%
 - D. F 4.5%
 - E. F 36%
54. About the examination of abdomen
- A. T Visible peristalsis is only seen in pyloric stenosis v
 - ~~B.~~ F Striae gravidarum is not found in ascites
 - C. F An enlargement spleen is usually bimannually palpable v Kidney
 - D. F Murphy's sign is positive in chronic cholecystitis v
 - ~~E.~~ T Diffuse abdominal enlargement with resonant flanks may be found in a patient with an ovarian cyst.
55. Criteria for admission of a burns patient include;
- ~~A.~~ T Inhalation injury > 10% (< 10%: 2/10/10)
 - B. F Burn size greater than 10% in any patient. p 10%
 - ~~C.~~ F Full thickness burn involving > 1% TBSA 5%
 - ~~D.~~ T Associated trauma

~~A~~ T Comorbid states

56. T Pain in burn patients:-

- ~~A~~ T May result in post-traumatic stress disorder
- ~~B~~ F Results in elevation of blood pressure ✓
- ~~C~~ T Increases the metabolic rate
- ~~D~~ T Is present in first degree burns
- ~~E~~ T May be minimal in fourth degree burns

57. Inhalation injury may be diagnosed by :-

- ~~A~~ F Determining the depth of the burn wound
- ~~B~~ T Fibreoptic bronchoscopic examination
- C. T Haemoglobin estimation
- D. F Determining the urine output
- E. F Gastric lavage

58. Escharotomy

- ~~A~~ T Is often necessary in circumferential full thickness burns
- ~~B~~ T Relieves the constriction caused by burn oedema
- C. F Is contraindicated in burns of the hands
- D. F Is often done on scalp burns
- E. T Is best performed immediately after the burn occurs ✓

59. Silver Sulphadiazine

- A. F Is an oral antibiotic useful for burn patients - Topical
- B. F Is painless & Painless
- ~~C~~ T May cause Neutropenia
- ~~D~~ T May cause hypersensitivity ✓
- E. T Has limited eschar penetration

60. A three (year) old child is seen who has had constipation since birth. He has had frequent bouts of abdominal distention. On examination, the child has a large abdomen with the colon containing gas and faecal material. Faeces are not palpable in the rectum. The most probable diagnosis is:

- A. F Enteroc
- B. F Massive anthic infection
- ~~C~~ T Hirschsp g's disease
- D. F Idiopath sprue
- E. F Duoden: tresia

SURG

RIYAMT

PAPER I

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END OF ROTATION CONTINUOUS ASSESSMENT EXAMINATION (CAE)

16. 03 2012

TIME ALLOCATED 1 1/2 HOURS 9.00 A.M. - 10.30 A.M.

INSTRUCTIONS:

YOU HAVE BEEN GIVEN 100 MULTIPLE CHOICE QUESTIONS. CHOOSE THE BEST ANSWER FOR EACH QUESTION. EACH CORRECT RESPONSE EARNS ONE MARK. THERE ARE NO NEGATIVE MARKS.

1. The following is a differential of cellulitis in children below 10 years

- a) Acute osteomyelitis
- b) Necrotizing fasciitis
- c) Pyoderma
- d) Localized abscess
- e) Dry gangrene

Obstructive Jaundice
 Not on Impulse consideration in pre-op
 management of patients with obstructive jaundice
 Pre-op in obstructive jaundice

- a) Bowel preparation ✓
- b) Rehydration ✓
- c) Prophylactic antibiotics ✓
- d) Full blood count ✓ vit-k
- e) Plasma protein levels ✓

Thyroidectomy
 The following complication of thyroid surgery can be completely avoided with proper pre-operative management

- a) Hoarseness of the voice ✓
- b) Hypocalcaemia ✓
- c) Hypoparathyroidism ✓
- d) Thyroid storm ✓
- e) Tracheomalacia ✓

Make sure pt in euthyroid
 Carbamazepole
 KI iodide
 Steroid
 O2
 Pre-OP Carbopranolol

The following consideration is not important in the pre-operative period

- a) Informed consent ✓
- b) Type of surgery ✓
- c) Position of the patient ✓
- d) Type of anaesthesia ✓
- e) Existing co-morbidities ✓

Obstructive jaundice
 In considering anaesthesia for patients with liver injury, the following is important

- a) Age of the patient ✓
- b) History of vomiting ✓
- c) History of consciousness ✓
- d) The occupation of the patient ✓
- e) History of alcohol intake ✓

Heart Injury
 pH, V, Valsal, Gant, Lac.

A 25 year old lady complains of painful defecation associated with rectal bleed. Possible diagnosis to consider

painful defecation

Anal fissure
 fresh py

- a) hemorrhoids → pilonidal sinus
- b) diverticulitis → severe amoebiasis
- c) pilonidal sinus → perirectal abscess
- d) anal fissure → hemorrhoids

- The fatal form of Leptospirosis is
 - b) Not a fatal disease *intermittent disease*
 - c) Caused by blood worms *fish, lymph*
 - d) Secondary lymphoedema *XI^o*
 - e) Post-splenic necrosis lymphoedema of the upper limb

13. Gas gangrene in *Gas gangrene*

- A common complication of acute peritonitis
- Caused by *Clostridium perfringens*
- c) A complication of gastritis
- d) Preceded by circulatory collapse
- e) Caused by *Bacillus anthracis*

14. Which statement with regards to *breast cancer* is TRUE?

- a) The commonest site of metastases is the axilla *bone*
- Local spread to the chest wall occurs earlier in male patients than female patients
- c) Kohnleifer's syndrome is supradiaphragmatic *subcutaneous*
- d) Breast sparing surgery always results in local disease recurrence
- e) There is *opportunity* for neo-adjuvant chemotherapy

15. The following signs & symptoms are consistent with *acute pancreatitis*:

- Patient exhibiting pain and vomiting *pain for dinner*
- b) Pain initially peri-umbilical, then moves to right iliac fossa
- c) Rovsing's sign positive
- d) Rectal temperature 38.1°C
- e) Tenderness over McBurney point

coloured cervical mucus on the same side. The next best to confirm diagnosis is best test to confirm diagnosis

~~10) UA cytology~~

11) Core needle biopsy - lymphoma

~~12) Perform left pharynx and subject exercises for histopathology~~

d) Radioactive iodine scan

e) Bone scan

Chronic subdural hematoma

17. A ¹⁸ 70 year old diabetic male resident of an old people's home brought to A&E with a two weeks history of episodic somnolence or confusion. He is reported to have fallen in the bathroom and hit his head two months ago. The most likely diagnosis is:

a) Alzheimer's disease

b) Acute subdural haematoma

~~c) Chronic subdural haematoma~~

d) Viral encephalitis

e) Epidural haematoma - Middle meningeal

18. Kaposi's sarcoma Kaposi's sarcoma

a) Is an X-linked recessive disease

~~b) Can be treated with radiotherapy~~

c) Does not respond to chemotherapy - Bleomycin, Vinorelbine, Vinorel

d) Only affects people with AIDS

~~e) Mainly affects the central nervous system~~

19. Initial fluid resuscitation of a patient with multiple fractures and hypovolaemia should be:

a) Blood transfusion

~~b) Hypertonic saline~~

c) Fresh frozen plasma

~~d) Rigors lactate~~

e) Albumin

20. The following ~~test~~ may be necessary in

- a) White blood cell count and differential
- b) Abdominal CT scan
- c) Fine needle aspiration
- d) Lymphangiography
- e) Trial therapy

21. Regarding medical ethics **Ethics**

- a) A doctor should ensure a chaperone is present when performing gynaecological examinations
- b) Counselling plays little importance in office procedures
- c) History taking is much more important than documentation of the history and record keeping
- d) Confidentiality is not important
- e) Substance abuse by doctors is tolerated occasionally

22. A 40 year-old man undergoes laparotomy for small bowel obstruction due to adhesions. During the release of the adhesions an enterotomy is made in the obstructed but viable gut resulting in spillage of faecal material into the abdomen. This converts the wound to

- a) Clean contaminated
- b) Secondary
- c) Infected
- d) Contaminated

e) Clean ~~found part the Rep, Gt, Genitourinary.~~

23. An 11-year-old boy presents with a sudden onset of ^{**Testicular Torsion**} right lower quadrant pain and acute tenderness accompanied by nausea and vomiting. Which of the following is the most likely diagnosis which also qualifies as a surgical emergency?

- a) Acute pancreatitis
- b) Acute epididymorchitis
- c) Testicular torsion
- d) Acute appendicitis
- e) Gastroenteritis

... with ...

- a) catheterisation
- b) surgery to repair malform
- c) suprapubic catheterisation if patient can pass urine *oxydofix*
- d) serotal exploration by incision
- e) Immediate exploratory laparotomy

25. Which statement with regards to burns is TRUE? *BURNS*

- a) the commonest cause of death is overwhelming infection *burns*
- b) In electrical burns, extent of surface injury is a good reflection of underlying injury *good*
- c) Flange burns are worse than scalds
- d) Partial thickness burns are aseptic
- e) Inhalation injury has no bearing on prognosis *Cholelithiasis*

26. Complications of cholelithiasis include all the following, except

- a) Cholangitis ✓
- b) Pancreatitis ✓
- c) Jaundice ✓
- d) Gastroenteritis *Gallstone Ulcers*
- e) Biliary strictures

27. In a patient with Jaundice, the best investigation would be:

- a) ERCP
- b) Liver function tests and abdominal ultrasound
- c) Abdominal CT scan
- d) Laparoscopy
- e) MRCP (Magnetic Resonance Cholangio-pancreatography)

28. Patients with Wilms' tumour most frequently present with which of the following?

- a) Bilateral metachronous lesions
- b) Bilateral synchronous lesions *Metachronous*
- c) An extrarenal primary
- d) A multicentric primary lesion
- e) A unifocal, unilateral lesion

29. Which of the following is the most common liver tumor of childhood?
 not common liver tumor of childhood
 → Rare

- ~~a) Hemangioma and hemangioendothelioma~~ - 10 + days
- ~~b) Hepatoblastoma~~ - 10 years old
- c) Hepatocellular carcinoma - 20-30 years
- d) Mesenchymal hamartoma - Met to lung
- e) Hepatoma - Age: 7A+

30. You are asked to recommend therapy for an asymptomatic 7 year old who swallowed a small alkaline watch battery 4 hours ago. A plain film shows the intact battery in the intestine beyond the stomach. The best course of therapy is?

- a) Immediate laparotomy, enterotomy and removal of the battery.
- b) Enteroscopy with extraction
- c) Laparoscopy with ultrasound localization and extraction
- ~~d) Cathartics and a follow-up plain film in 48 hours if the child remains asymptomatic~~
- e) Colonoscopic extraction

31. The treatment of choice for neonates with uncomplicated meconium ileus is:

- a) Observation
- b) Emergency laparotomy, bowel resection, and Bishop-Koop enterostomy.
- ~~c) Intravenous hydration and a Gastrografin enema~~ - Inguinal Hernia
- d) Emergency laparotomy, bowel resection, and anastomosis.
- e) Sweat chloride test and pancreatic enzyme therapy.

32. Polyhydramnios is frequently observed in all of the following conditions except:

- a) Oesophageal atresia ✓✓
- b) Duodenal atresia ✓✓
- c) Pyloric atresia ✓✓
- ~~d) Hirschsprung's disease~~
- e) Congenital diaphragmatic hernia

33. Which of the following is correct in thyroid cancer? Thyroid ca

- a) Anaplastic carcinoma has a good prognosis if treated promptly. F
- b) Follicular carcinoma spreads via the lymphatic system → Hematogenous invasion
- ~~c) Medullary carcinoma is associated with calcitonin~~ → parafollicular cells
- d) Papillary carcinoma is associated with RTN → lymphatic, large people
- e) The majority are follicular carcinomas papillary F

34. Which of the following is NOT an ultrasonographic finding in acute cholecystitis?
 X Absence of gallstones X Acalculous
 Gallbladder wall thickness more than 6 mm Poei 4 mm
 e) Psychologic sign = Gallstone, Tumor, Lipid
 d) Sonographic Murphy's sign T ✓
 c) Gall bladder wall thickness of more than 4 mm ✓

Large gallbladder wall - ()
 Small pericystic fluid
 Pericholecystic fluid
 Sonographic Murphy's sign
 Air in gallbladder
 Air in wall of gallbladder
 No stones seen

35. The following is true with regards to carcinoid tumours
 a) Most commonly affect the colon Yes T lungs
 b) Symptoms of carcinoid syndrome often arise after metastases have arisen F
 c) Carcinoid syndrome occurs once lung metastases have occurred F
 d) Urinary (5-HIAA) is elevated in patients with carcinoid syndrome
 e) Surgery is deemed inappropriate once the tumour has metastasised chemo - SFU mito - capsule

Carcinoid tumours
 arise from Merkel's
 Divergents

36. fissure in ano
 a) Is premalignant X Fichula iwano
 b) Respond raw to topical glycerol trinitrate (GTN) X Bot Toxa, laxative
 c) Are mainly Post laterally located X Posteriorly BT to a half sphincter
 d) Usually require surgical intervention
 e) Can be treated using botulinum toxin

37. Aetiological factors for sigmoid volvulus include:
 a) Chronic constipation Sigmoid volvulus
 b) High fibre diet High meqalw
 c) Colon cancer
 d) Warfarin
 e) Previous left hemicolectomy

38. A patient with Duke's C ascending colon cancer:
 a) Will have a poorer prognosis than a patient with Duke's D disease X F
 b) Can expect survival benefit with adjuvant chemotherapy ✓
 c) Is most likely to develop metastatic disease in the right kidney
 d) May have any T-stage using the TNM staging system ✓
 e) Must be offered post-operative radiotherapy X

Colon ca
Duke's C
 A - Confined to bowel wall
 B - through bowel wall but not

IP
 milder abd pain
 ushang
 malabsorption
 causing
 these symptoms

39. Colonoscopy:

- a) Does not require formal mechanical bowel preparation ~~X~~ F
- b) Carries a 1% perforation rate $0.01\% - 0.2\%$
- ~~c) Is more sensitive than faecal occult blood testing at detecting colorectal polyps~~ F
- d) Is safest when performed under general anaesthesia ~~X~~ F *conscious sedation*
- e) Unlike ultrasound is not user dependent ~~X~~ F

40. Anorectal (per-anal) abscesses

- a) Cause pain on defecation only ~~X~~ F
- ~~b) May discharge spontaneously into the rectum~~ F
- c) Should be treated initially with high dose intravenous antibiotics ~~X~~ F
- d) Are not associated with systemic disorders ~~X~~ F
- e) Are more likely to recur if a skin-derived organism is cultured F

41. Regarding stomas

- ~~a) Ileostomies are mainly sited in the right lower quadrant~~ T
- b) Colostomies should have a spout to protect the surrounding skin ~~F~~ F *flushed* *ileostomy, urostomy*
- c) Loop transverse colostomy is associated with fewer complications than loop ileostomy F
- d) Defunctioning stoma must be reversed within six months ~~F~~ F *2 months*
- e) Peristomal hernias usually results from ischaemia F

42. While strolling in the neighbour hood in the morning, a 30 year old man develops sudden ~~excruciating~~ *occasional pain in da right flank n back* pain in the right flank and back and which radiates to right groin radiates to the right groin. What is the most likely diagnosis

- a) Acute mesenteric ischaemia
- b) Muscle spasm
- ~~c) Ureteric colic~~ F
- d) Prolapsed intervertebral disc
- e) Ruptured abdominal aortic aneurysm

43. A 50-year-old man presents with abdominal distension and vomiting. Which of the following abdominal X-ray features will point to small bowel obstruction?

- a) Free air under the diaphragm ~~X~~ F *Perforation*
- b) Dilated bowel with haustra ~~X~~ F *large bowel*
- c) Peripheral position of distended loop ~~X~~ F
- d) Presence of air in the rectum ~~X~~ F *large bowel*
- ~~e) Presence of valvulae conniventes in distended loops of bowel~~ F

W. H. H. H.

43. The most common site for lymph nodes along the internal thoracic vessels

a) The axilla contains the most lymph nodes

b) The paratracheal lymph nodes are the most common

c) The subdiaphragmatic lymph nodes are the most common

d) The paratracheal lymph nodes are the most common

e) The subdiaphragmatic lymph nodes are the most common

45. Regarding investigations of the breast **breast**

- a) ~~Physical assessment is a reliable way for diagnosing breast cancer~~
- b) Mammographic interpretation is easier in young women
- c) Mammography involves exposure to high radiation dose
- d) Fine needle aspiration cytology (FNAC) is always reliable
- e) Ultrasound is an effective screening tool

clinical ^{W. H. H.}
breast ^{W. H. H.}
breast ^{W. H. H.}

46. Breast abscesses **breast**

- a) Occur only in lactating women ~~X~~
- b) The common causative organism is *Staphylococcus aureus* ~~X~~
- c) Must always be included in the differential diagnosis ~~X~~
- d) ~~May indicate an underlying carcinoma~~
- e) Requires breast feeding to stop ~~X~~

47. Clinical examination of the breast **breast**

- a) ~~The most common sign and symptom of breast disease is a palpable mass~~
- b) Clinical assessment of axillary nodes is very accurate
- c) A bloody nipple discharge is an early finding in breast cancer ~~X~~
- d) Ulceration of the skin is an early finding in breast cancer ~~X~~
- e) Examination of the abdomen is an accurate method for picking up metastases

48. In examining the thyroid gland **thyroid**

- a) ~~Palpation of the gland is performed from behind the patient~~
- b) The neck should be extended during palpation
- c) The ears must be examined
- d) If no mass is felt in the gland there is no need to examine the neck lymph nodes
- e) A stethoscope is not essential

49. Enlargement of the left supraclavicular fat (Virchow's) lymph node is not associated with

- a) Breast adenocarcinoma
- b) Gastric adenocarcinoma
- c) Parathyroid pleomorphic adenoma
- d) Ovarian serous carcinoma
- e) Hepatocellular carcinoma

50. Incisional hernias

- a) Are increased by post-operative wound infection
- b) Can be prevented by use of a corset
- c) Always require surgical correction
- d) Are more common in thin patients
- e) Can be avoided by using laparoscopic surgery

51. A strangulated hernia of angulated hernia

- a) Can be treated by reducing the hernia
- b) May be reducible
- c) Is usually painless
- d) Should be managed with early surgery
- e) Is more commonly observed in inguinal than femoral hernias

52. Complications of hernia surgery include hernia

- a) Loss of sensation to the ipsilateral side of the penis
- b) Loss of sensation to the skin of the lower abdomen
- c) Impotence
- d) Recurrence of the hernia Incision
- e) Hydronephrosis

*53. When managing post-operative fluid requirements

- a) Hypotension may worsen acute renal failure
- b) Fluid restriction is always needed in liver failure
- c) A central venous pressure of 4 mmHg usually indicates hypovolaemia 38
- d) Excessive gastrointestinal losses can be adequately replaced by 4% dextrose 0.18% saline solution (dextrose saline)
- e) Urine output is not a good indicator of organ perfusion in the post-operative surgical patient F

- a) Sodium is elevated
- b) Potassium is elevated
- c) Metabolic rate is decreased
- d) Urinary nitrogen levels fall
- e) ADH secretion is reduced

55. During the first hour of untreated acute blood loss of 15% of blood volume

- a) Peripheral vascular resistance decreases ~~X~~
- b) Fluid shifts from the interstitial space to the intravascular space
- c) Oliguria is mainly due to ADH secretion ~~X~~
- d) Capillary permeability is reduced
- e) Reticulocyte count increases ~~X~~

56. Consequences of total parenteral nutrition (TPN) include

- a) Pancreatitis
- b) Altered gut flora
- c) Reduced mortality after major surgery
- d) Reduced gut permeability
- e) Hypoglycaemia

TPN
 enteric nutrition
 - Tube related
 - Malposition etc
 - GIT eg ID
 - Metabolic
 - Infection

Related 2 nutrient
 Related 2 overper
 Related 2 sepsis
 Related 2 line

57. Chronic ^{ulcer} ulcers **Chronic ankle ulcers**

- a) Are usually due to arterial disease
- b) Should always be treated with compression bandaging
- c) Should be biopsied if not healing
- d) Are more common below the medial malleolus
- e) Should be treated with topical antibiotics

58. Urethral Catheterization **Urethral Catheterization**

- a) Acute urinary retention is an uncommon urological indication
- b) Foley catheters are retained in the bladder by a coiling device
- c) Is performed using a clean technique **ASEPTIC**
- d) Suprapubic catheters are used instead of urethral catheters in patients presenting with frank haematuria and clot retention
- e) Urethral stricture is a recognised complication

mostly invasive techniques for BPH

59. The following statement about benign prostatic hyperplasia is false

- a) Arises from the ^{peripheral} peripheral zone of the prostate
- b) Is generally a disease of elderly men
- c) Trans-urethral resection of the prostate (TURP) is the most common surgical treatment
- d) Is commonly treated with alpha-blockers - *↓ smooth muscle tone*
- e) Can lead to renal failure

60. Obstructive urinary symptoms include

- a) Frequency
- b) Haematuria
- c) Hesitancy
- d) Urgency
- e) Nocturia

Intensive FUND

61. Testicular torsion

- a) Occurs most frequently between the ages two and ten years
- b) The underlying cause is known as the 'ball and chain' abnormality
- c) Is commonly associated with dysuria
- d) Classically presents as a painful, high riding testicular with a horizontal lie
- e) Can be treated expectantly to see if it resolves

62. Suprapubic catheters

- a) Should be inserted when the bladder is empty
- b) Are inserted ^{2cm} 2 cm below the umbilicus
- c) Is the first choice of catheter for patients in acute urinary retention
- d) Complications include bowel perforation
- e) Should always be inserted in theatre under aseptic conditions

63. Routine investigations for haematuria do not include

- a) Urea and electrolytes
- b) Ultrasound scan of the kidneys, ureters, and bladder (KUB)
- c) Full blood count
- d) Angiogram
- e) Flexible cystoscopy - *Leads, ureteroscopy, [cystoscopy]*

- a) Isopropylidene (e.g. Pylone) is a bulk forming agent
- b) Lactulose is a glucose polymer
- c) Lactulose is hydrolyzed by bacteria in the small intestine
- d) Senna is a salt stimulant that acts within 30 minutes
- e) Laxative abuse can lead to hyperkalemia and colonic atony

65. Regarding bladder tumours, all are true except
~~75%~~ are squamous carcinomas TCC + mt on TCC

- b) Painless haematuria is the commonest presentation
- c) Cigarette smoking is an important aetiological factor
- d) 80% of tumours are superficial (i.e. no muscle invasion)
- e) Superficial tumours are often well controlled by transurethral resection

66. Which of the following is the commonest symptom of gastro-oesophageal reflux disease? GERD

- a) Regurgitation
- b) Hoarseness
- c) Water brash
- d) Globus sensation
- e) Oesynophagia

67. Type II gastric ulcers Gastric ulcers

- a) Occur only in the lesser curvature of the stomach
- b) Occur only in the antrum of the stomach
- c) Occur both in duodenum and body of the stomach
- d) Occur both in lesser curvature and duodenum
- e) Does not depend on hypersecretory state for its occurrence

68. Diagnostic peritoneal lavage is positive when all the following are present except. DPL

- a) Red blood cells are more than 100,000 per mm³
- b) White blood cells are more than 500 per mm³
- c) Amylase of more than 200 IU/L
- d) Alkaline phosphatase level of more than 1 IU/L
- e) Any bile material

WBC > 500 cells/mm³
 RBC > 100,000 "
 blood > 10 ml/L
 Bile / Bacteria / Food particle
 Amylase > 175 IU/ml

Any fecal matter 7000 ml stool

69. The following are systemic complications of peritonitis except

- a) Bone marrow suppression ✓
- b) Renal failure ✓
- c) Respiratory failure ✓
- d) Liver abscess ✓
- e) Endotoxic shock ✓

Bacteremic leucocytosis
Anorexia
Renal failure
Bone marrow suppression
Hypotension

Not found
✓ Adhesions
✓ Small bowel obstruction
✓ Paralytic ileus
✓ Acute tubular necrosis
✓ Portal pyaemia

70. A 15 year old lady comes to the Accident and Emergency with history of sudden onset right iliac fossa pain, no nausea or vomiting. On examination she has tenderness of right (inguinal) fossa with no rebound. She has leucocytosis. The temperature is normal. What is the appropriate action?

- a) Appendectomy ✓
- b) Ultrasound ✓
- c) Repeat the complete blood count
- d) The patient should be sent back home with pain killer
- e) Patient should be re-examined with a senior person

71. Regarding nipple retraction

- a) Is never congenital
- b) Is always pre-malignant
- c) Requires intervention always

~~It is a slit-like retraction may be due to duct ectasia or chronic periductal mastitis~~

- d) Circumferential retraction has no significance ✓

72. In an endemic goitrous area, the commonest thyroid cancer is:

- a) Papillary thyroid cancer ✓ - radiation - commonest
- b) Medullary thyroid cancer
- c) Lymphoma
- d) Anaplastic thyroid carcinoma

~~Follicular thyroid carcinoma~~ - TSH stimulation

73. Which of the following does not describe laparoscopic surgery?

- a) Smaller scars ✓
- b) Reduced post-operative pain ✓
- c) Shorter hospital stay ✓
- d) Faster return to normal function ✓
- e) No lifting heavy weights after operation ✓

The most acceptable operation for this mass is

- a) Haemorrhoidectomy
- b) Anterior resection
- c) Abdomino-perineal resection
- d) Lateral sphincterotomy
- e) Rectal resection and "pull through"

A - 1 rect
 0 - splinted
 - Alloms part

75. Regarding phimosis, the following are correct EXCEPT

Phimosis

- a) Sometimes associated with diabetes mellitus
- b) Occurs only in children
- c) Balanitis xerosica obliterans is a cause
- d) Can cause urinary obstruction
- e) Treatment is circumcision

steroid; diet
 Urethral stricture

except

76. Causes of urethral stricture except

- a) Congenital
- b) Traumatic
- c) Instrumentation

Andromore also known as prostatic
 relative within his

- d) Indwelling catheter

77. Which of the following is not part of routine management of cellulitis of the leg?

- a) Antibiotics
- b) Elevation of the limb
- c) Analgesics
- d) Surgical toilet
- e) Antipyretics

Cellulitis
 Antibiotic
 Analgesic
 Antipyretic
 Elevate limb
 Anticoagulate

78. The most common topical dressing for thermal burns is

- a) 1% silver sulphadiazine
- b) 1% silver nitrate solution
- c) Mafenide acetate cream
- d) Bacilligras
- e) 0.5% silver nitrate

Burns

79. A 15 year boy weighing 35kg comes in with 3% burns that occurred one hour ago, what is the total amount of fluid to be administered over 24 hrs. Burns

- a) 900ml
- b) 1300ml
- c) 3100ml
- d) 2500ml
- e) 22500ml

Handwritten calculations:
 $4 \times 25 \times 15$
 1000
 $10 \times 25 \times 15$

Handwritten notes:
 Burnslands =
 $4 \times 25 \times 15 \times 4$
 $4 \times 25 \times 15 \times 4$

80. Which of the following items of the patient's history and/or exam would suggest you do not have a high risk of inhalation injury?

- a) Sulphuric acid splashed by a jealous wife
- b) Dragged from a burning hotel T
- c) Carbonaceous sputum T
- d) Hoarse voice in a patient T
- e) singed facial hair T
Singed

Tachypnea

81. The following are important when taking history concerning injury except Pain.

- a) Site
- b) Onset
- c) History of injury
- ~~d) Surface~~
- e) Timing

SOCRATES

82. A 45 year old man with a history of involvement in road traffic accident present with history of loss of consciousness, opening eyes only to pain, flexes upper limbs but extends lower limb in pain, an unequal pupils - he reacts on pain. The right pupil is dilated. What is the Glasgow Coma scale score? GCS

- a) 9
- b) 8
- ~~c) 7~~
- d) 6
- e) 10

Handwritten notes for GCS:
 1 - 4 - 5
 (3) (4) (5)

Verbal 5
 4 Spontaneous
 3 Pain
 2 voice
 1 No

Eye 3
 Spontaneous 3
 voice 3
 pain 2
 No



UNIVERSITY OF NAIROBI

College of Health Sciences
SCHOOL OF MEDICINE
DEPARTMENT OF SURGERY

MUNINGUA
Amulani
SURG

MBChB V END OF ROTATION CONTINUOUS ASSESSMENT EXAMINATION (MCO)

DATE: 12/10/2015

TIME: ALLOCATED 1 1/2 HOURS - 9.00 AM - 10.30 AM

INSTRUCTIONS:

YOU HAVE BEEN GIVEN 100 MULTIPLE CHOICE QUESTIONS. CHOOSE THE BEST ANSWER. EACH CORRECT ANSWER EARNS ONE MARK. ANSWER IN THE ANSWER SHEET PROVIDED

- A 27 year old woman experiences peri-oral numbness the morning after neck surgery. What is the most likely cause of her symptoms:

Total thyroidectomy will remove of parathyroid glands
 → peri-oral numbness
 → trouble with
 → chestbeating

 - A. Hypokalaemia
 - B. Hypercalcaemia
 - C. Hypocalcaemia
 - D. Hypochloraemia
 - E. Hyperkalaemia
- A 40 year old man undergoes laparotomy for small bowel obstruction due to adhesions. During the release of the adhesions an enterotomy is made in the obstructed but viable gut resulting in spillage of faecal material into the abdomen. This converts the wound to:

 - A. Clean contaminated
 - E. Secondary
 - C. Infected
 - D. Contaminated
 - E. Clean
- Delayed primary wound closure would be most appropriate for the following procedure

 - A. Removal of perforated appendix
 - B. Repair of wound dehiscence one week after colectomy
 - C. Emergency drainage of a diverticular abscess with sigmoid resection and end colostomy
 - D. Partial gastrectomy for a bleeding duodenal ulcer
 - E. Repair of incisional hernia 10 weeks after an elective left colectomy complicated by a wound infection and a resultant incisional hernia

✓ 4. Several studies have followed up patients with asymptomatic gallstones. What percentage of patients develops symptoms after 5 - 20 years?

- A. < 2%
- B. 10 - 20 %
- ✓ C. 30 - 40 %
- D. 50 - 60 %
- E. 60%

✓ 5. In a patient with hypovolaemic shock, which cannular size would you ideally choose for infusion?

- A. 21G
- ✓ B. 19G
- ✓ C. 14G *largest*
- D. 26G
- E. 30G

✓ 6. Charcot's triad consists of:

- A. Fever, nausea and vomiting
- ✓ B. Pain, nausea and jaundice
- C. Pain, nausea and vomiting
- ✓ D. Pain, jaundice and fever
- E. Jaundice, fever and nausea

Pain, Fever, Jaundice

✓ 7. Meige's disease is:

- ✓ A. The familial form of lymphoedema praecox
- ✓ B. Not a familial disease *autosomal dominant*
- C. Caused by filarial worms
- D. Secondary lymphoedema
- E. Post-axillary surgery lymphoedema of the upper limb

Primary Lymphoedema

- congenital hereditary (Milroy's)
- lymphoedema praecox (Meige's)
- lymphoedema tarda

secondary lymphoedema

8. Falsely high non-invasive blood pressure measurements may not be associated with:-

- A. Relatively smaller cuffs *high*
- ✓ B. Loosely applied cuff *low*
- C. Extremity below the heart *high*
- D. Even compression applied on arm
- E. Larger cuffs *low*

*cuff length 80% of arm circumference
width 40%*

9. In anorectal malformation, the following statements are true except:-

- A. Occurs in one in 5000 births ✓
- ✓ B. The commonest lesion in females is recto-vaginal fistula *rectovaginal fistula*
- ✓ C. Recto-urethral fistula is the commonest lesion in males *rectourethral fistula*
- D. Persistent cloaca is the third most common lesion in females ✓
- E. Imperforate anus in males or females occurs in under 12% of cases

*- 5000 live births
- 70% M 50% F
- 95% ARM and fistulae
- 50% w/o fistula w/ bowel syndrome*

Associated anomalies

- ✓ - sacral agenesis, tethered cord, syringomyelia
- A - anorectal malformation
- C - CVS: ASD, PDA, TOF + VSD
- T - tracheo-oesophageal fistula / atresia

10. The following lesions are developmentally similar except:-

- A. Rectal urethral fistula ✓
- B. Imperforate anus ✓
- C. Recto-vestibular fistula ✓
- D. Persistent cloaca ✓
- E. Rectal atresia ✓

11. Which of the following lesions will require colostomy as an emergency life saving procedure?

- A. Imperforate anūs in males and females ^{↳ into fistula} ✓
- B. Perineal fistula in both sexes
- C. Recto-vestibular fistula
- D. Recto-urethral fistula ^{urgent but not emergency.}
- E. Persistent cloaca

12. Mrs Joseph, a 47 year lady is complaining of epigastric and right hypochondrial pain. She has nausea and has been vomiting for the last 24 hours. She recalls that the symptoms started when she was eating a cheese cake. The pain did not respond to over the counter antacids and prokinetic drugs which she tried. On examination she was an obese lady. Her liver enzymes are marginally elevated. Which ONE of the following is the most appropriate next investigation?

- A. Erect abdominal x-ray ✓
- B. Endoscopy ✓ ERCP
- C. Ultrasound scan of the abdomen ✓
- D. H1 breath test for H pylori ✓
- E. CT abdomen ✓

forty female fat → Gall stones

Effect & complications of gallstones

- biliary colic
- acute + chronic cholecystitis
- empyema of the gall bladder
- mucocele
- perforation
- biliary obstruction
- acute cholangitis
- acute cholecystitis + pancreatitis
- gallstone ileus (rare)

Differentials

- Common → appendicitis, perforated PO, acute pancreatitis
- Rare → acute pyelonephritis, myocardial infarction, pneumonia - right lower lobe.

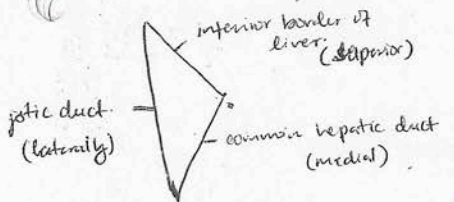
NON-op Mgt

- NPO + IV fluids.
- Analgesics.
- Antibiotics: c1-ve - ceftriaxone, gentamicin.

operative

Priority to - diabetics, Perforation, Cholangitis, sepsis
- congenital hemolytic anaemia.

Calot's triangle



Catapillar turn → tortuous common hepatic artery.
McVernan's hump → tortuous right hepatic artery w/ short cystic artery

Surg Topics

ver + Gall bladder things.
pancreatitis.

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 13-17. Each choice may be used once, more than once or not at all.

- A. Immediate laparotomy
- B. Diagnostic peritoneal lavage *hemodynamically unstable*
- C. Abdominal CT scan
- D. Observation
- E. Pericardiocentesis

Pericardiocentesis

- ✓ 13. Haemodynamically stable road traffic accident (RTA) victim with free gas under the diaphragm. **C**
- ✓ 14. Haemodynamically stable RTA victim who has blunt abdominal trauma with a grade I liver injury on CT scan **D** (*Observation*)
- ✓ 15. Patient with multiple rib fractures without haemo/pneumothorax but has hypotension, distant heart sounds and low blood pressure following blunt chest trauma **E** (*Pericardiocentesis*) → *Catheter tamponade*
- ✓ 16. Patient with ruptured urinary bladder following blunt abdominal trauma **A** (*Abdominal laparotomy*)
- ✓ 17. Patient who presents two days after blunt abdominal trauma with tachycardia, fever and abdominal distension **C** (*Abdominal CT scan*)

18. Which one of the statements is INCORRECT with regard to sepsis

- A. Tachycardia or tachypnea may be a sign ✓
- B. Sepsis is defined as systemic inflammatory response syndrome in the presence of infection ✓
- ✓ C. Leucocytosis or leukopenia may be a sign ✓
- D. Sepsis and hypotension is defined as septic shock ✓
- E. Temperature greater than 38 or less than 36 may be a sign ✓

19. Which of the following clinical conditions is not associated with rapid gastric emptying?

- A. Pancreatic insufficiency ✓
- B. Hyperthyroidism ✓
- ✓ C. Hypocalcaemia
- D. Impaired fat absorption ✓
- E. Zollinger-Ellison syndrome

20. Infection with *Helicobacter pylori* has been associated with all of the following conditions EXCEPT:

- A. Duodenal ulcer
- B. Gastric cancer (A. 100%)
- C. Mucosa associated lymphoid tissue [MALT] lymphoma
- D. Gastroesophageal reflux disease [GERD]
- E. Chronic gastritis

Duodenal ulcer
Gastric ulcer
Gastritis
Gastric ca
Gastric mass associated
lymphoid lymphoma
(MALTOMA)

21. A 75 year old man taking NSAIDs for arthritis has an acute abdomen and pneumoperitoneum. His symptoms are 6 hours old and his vital signs are stable after the infusion of 1L of normal saline solution. What should the next step in the management of this patient?

- A. Computed tomography of the abdomen
- B. Esophagogastroduodenoscopy [EGD]
- C. Antisecretory drugs, broad spectrum antibiotics, and surgery if he fails to improve in 6 hours
- D. Antisecretory drugs, antibiotics for *H. pylori*, and surgery if he fails to improve in 6 hours
- E. Surgery

Perforated ulcer

24. Which of the following is the best test to confirm eradication of *Helicobacter pylori*?

- A. Negative histology after biopsy during endoscopy
- B. Negative faecal antigen test
- C. Negative urea breath test
- D. Negative urea blood test
- E. Negative urine antigen

27. A 45-year old man requires surgery for an intractable duodenal ulcer. which operation best prevents ulcer recurrence

- A. Subtotal gastrectomy
- B. Truncal vagotomy and pyloroplasty
- C. Truncal vagotomy and antrectomy
- D. Selective vagotomy
- E. Highly selective vagotomy

low recurrence

23. The most common cause of gastric outlet obstruction in adults is

- A. Peptic ulcer disease
- B. Extrinsic neoplastic compression
- C. Cancer
- D. Primary lymphoma of the stomach
- E. Duodenal Crohn's disease

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 25-29.

- A. Fluctuating levels of consciousness
- B. Lucid-interval
- C. Posterior fossa tumour ✓
- D. Bitemporal hemianopsia ✓
- E. Retroviral infection ✓

- * 25. Chronic subdural haematoma **B**
- B** 26. Extradural haematoma **A B**
- D** 27. Pituitary adenoma **D D**
- C** 28. Ventriculoperitoneal shunt is indicated **CC**
- E** 29. Primary brain lymphoma **E**

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 30-34. MATCH THE CHOICES WITH THE MOST APPROPRIATE ANSWER.

- A** • Stewart-Treves' syndrome
- B** • Von Hippel-Lindau disease
- C** • Von Recklinghausen's disease **34**
- D** • Lynch syndrome
- E** • Peutz-Jegher's syndrome

- 30. Renal cell carcinoma **A**
- 31. Increased risk of soft tissue sarcoma **B**
- 32. Increased risk of colon cancer and endometrial cancer **E**
- 33. Lymphangiosarcoma associated with lymphoedema following radical mastectomy **A E**
- 34. Neurofibromatosis type I **E**

- * **35** With regard to the storage of banked blood, which of the following statements is true?
- A. Packed red blood cells stored in additive solution (AS-3) and kept at 4°C are suitable for transfusion for 3 months. **+**
 - B. Platelets in blanked blood retain their function for 3 days. **+**
 - C. Factor II, VII IX and XI are stable at 4°C **+**
 - D. A decrease in red blood storage cell oxygen affinity occurs during storage as a result of a decrease in 2, 3-diphosphoglycerate (2,3-DPG) levels.
 - E. There is a significant rate of hemolysis in stored blood.

36. In cirrhotic patient who are actively bleeding, the coagulopathy of end-stage liver disease can be differentiated from DIC most readily by estimation of which of the following factors?

- A. Factor II
- B. Factor V
- C. Factor VII ✓
- D. Factor VIII:C
- E. Factor X

37. Which of the following statements regarding the distribution, composition, and osmolarity of the body fluid compartments is not true?

- A. Most intracellular water resides in skeletal muscles.
- B. The principal intracellular cation is sodium ✓
- C. Nonpermeable proteins determine the effective osmotic pressure between the interstitial and intravascular (plasma) fluid compartments.
- D. Calcium greatly determines the effective osmotic pressure between the ICF and ECF
- E. The principal extracellular anion are chloride and bicarbonate.

38. Which one of the following is not a stimulus for ECF expansion?

- A. Hemorrhage leading to a reduction in blood volume
- B. Increased capillary permeability after major surgery ✓
- C. Peripheral arterial vasoconstriction
- D. Negative interstitial fluid hydrostatic pressure ✓
- E. Colloid oncotic pressure ✓

39. Which of the following statements regarding hypervolemia in postoperative patients is not true?

- A. Hypervolemia can be reduced by the administration of isotonic salt solutions in amounts that exceed the loss of the volume.
- B. Acute overexpansion of the ECF space is usually well tolerated in healthy individuals
- C. Avoidance of volume excess requires daily monitoring of intake and output and determinations of serum sodium concentrations to guide accurate fluid administration.
- D. The most reliable sign of volume excess is peripheral edema ✓
- E. The earliest sign of volume excess is weight gain.

40. Which of the following pairing statements regarding daily fluid balance is incorrect?

- A. Daily water intake, 2000 to 2500 mL
- B. Average total loss, 1000 mL *Paradox*
- C. Average insensible loss, 600 mL
- D. Average urine volume, 800 to 1500 mL
- E. Average increase in insensible loss in a febrile patient, 250 mL/day for each degree of fever.

65
64500
3000 mL
Fluid Balance

* 41. With regard to intraoperative management of fluids, which of the following statements is true?

- A. In a healthy person, up to 500mL of blood loss may be well tolerated without the need for the blood replacement ✓ *a part of blood*
- B. During an operation, functional ECF volume is directly to the volume lost to suction.
- C. Functional ECF losses should be replaced with plasma
- D. Administration of albumin plays an important role in the replacement of functional ECF volume loss.
- E. Operative blood loss is usually overestimated by the surgeon.

* 42. A 70-year-old man with sepsis has a pH of 7.18. Which of the following statements is true regarding his metabolic acidosis?

- A. Tissue hypoxia leads to increased oxidative metabolism.
- B. Acute compensation for metabolic acidosis is primarily renal.
- C. Metabolic acidosis results from the loss of bicarbonate or the gain of fixed acids
- D. The most common cause of excess acid is prolonged nasogastric suction. ✗
- E. Restoration of blood pressure with vasopressors corrects the metabolic acidosis associated with circulatory failure.

* 43. Which of the following is true with regard to the metabolic response to stress as described by Cuthbertson:

- A. The flow phase of Cuthbertson's two-phase model of the metabolic response to injury is characterized by physiologic responses designed to restore tissue perfusion and circulating volume.
- B. The ebb phase begins once the patient is successfully resuscitated.
- C. The ebb phase entails both a catabolic and an anabolic period.
- D. The flow phase occurs initially after traumatic injury.
- E. The anabolic phase starts after wounds have closed and is characterized by the return of normal homeostasis.

44. Which of the following cases is considered a dirty wound?

- A. Open cholecystectomy for cholelithiasis
- B. Herniorrhaphy with mesh repair
- C. Open prostatectomy
- D. Appendectomy with walled-off abscess ✓ *abscess*
- E. Thyroidectomy

* 45. Acute haemolytic transfusion reaction is associated with:-

- A. ABO incompatibility ✓
- B. Minor blood group incompatibility
- C. Rh incompatibility
- D. Transfusion through Ringer's lactate
- E. Transfusion through 5% dextrose and water

Blood Transfusion & Shock.

- * 46. A patient with a non-obstructing carcinoma of the sigmoid colon is being prepared for elective resection. To minimize the risk of postoperative infectious complications, your planning should include:-
- A. A single pre-operative parenteral dose of antibiotic effective against aerobes and anaerobes
 - B. Avoidance of oral antibiotics to prevent emergence of *Clostridium difficile*
 - C. Parenteral nutrition
 - D. Postoperative administration for 5-7 days of parenteral antibiotics effective against aerobes and anaerobes
 - E. Operative time less than 5 hrs
47. The most important effect of pre-operative potassium iodide solution in thyroid surgery is:
- A. A reduction in thyroid storm
 - B. Reduced vascularity of the gland ✓ 3 make a pin
 - C. Increased chance of saving the parathyroid glands
 - D. Reduced risk of recurrent laryngeal nerve damage
 - E. Pigment deposition in the parathyroid gland which helps to identify them
- * 48. Phosphate containing solutions for bowel preparation for colonoscopy are contraindicated in the elderly because of the risk of:
- A. Hypokalaemia
 - B. Hypercalcaemia
 - C. Large fluid shifts ✓
 - D. Nausea and vomiting
 - E. Bloating
49. Severe and complicated pancreatitis is associated with all of the following EXCEPT:
- A. Adult Respiratory Distress Syndrome ✓
 - B. Hyperglycaemia ✓
 - C. Ascites ✓
 - D. Hypocalcaemia
 - E. Gout
- * 50. In inflammatory bowel disease, which extra-gastrointestinal manifestation is more likely in a patient with ulcerative colitis than one with Crohn's disease?
- A. Uveitis
 - B. Renal stones
 - C. Gallstones
 - D. Venous thrombosis
 - E. Erythema nodosum ✓

* 51. With regard to MEN IIA

- A. Pheochromocytoma will 20% of cases *50%*
- B. Medullary thyroid carcinoma will be present all the time *almost all the time*
- C. Parathyroid over activity will be present 60% of cases
- D. Parathyroid tumours will be present all the time *50%*
- E. Most of the time pheochromocytoma will be bilateral *X*

* 52. With regard to risk of breast tumour, all the following syndromes carry genetic risk of the disease EXCEPT:

- A. Women with Li-Fraumeni syndrome are at risk *X*
- B. Men with Cowden syndrome are at risk *X*
- C. Muir-Torre syndrome.
- D. Sipple syndrome, *MEN II*
- E. Ataxia-telangiectasia.

53. Which of the following is true with regard to hernia?

- A. It is impossible to differentiate femoral from inguinal hernia clinically *X*
- B. It is impossible to differentiate indirect from direct hernia clinically *X*
- C. Ultrasound is always the investigation of choice before diagnosis of hernia
- D. Hernia is the commonest cause of intestinal obstruction in developed countries *X*
- E. Saphena varix is a differential diagnosis of groin hernia.

54. Assessment of a breast lump include all of the following EXCEPT

- A. Clinical examination *✓*
- B. Mammography
- C. Core biopsy *✓*
- D. Ultrasonography
- E. Mastectomy *✓*

Type assessment

* 55. Which of the following conditions is associated with an isolated prothrombin time (PT) prolongation?

- A. von Willebrand disease
- B. Factor VIII deficiency (hemophilia A)
- C. Common pathway factor deficiencies (factors II, V, and X and fibrinogen)
- D. Therapeutic anticoagulation with warfarin (Coumadin)
- E. Therapeutic anticoagulation with heparin

- 1st year
- RTA

USE THE FOLLOWING INFORMATION FOR QUESTIONS 56-60. A two year old boy presents in hospital having been run over by his father when he was reversing in the driveway. He is found to be drifting in and out of consciousness, blood pressure of 50/35mmHg, pulse of 120 beats per minute and capillary refill of 4 seconds.

A B C D E

56. What will be the initial management?
- A. Put a large bore intravenous cannula and start saline boluses
 - B. Take to theatre for exploration x
 - C. Give oxygen
 - D. Immobilise any fractured bones to prevent further bleeding x
 - E. Secure the airway ✓

20 x 70 = 1.4 L

57. In giving saline boluses, the recommended initial dose is
- A. 20ml/kg body weight ✓
 - B. 10ml/kg
 - C. 100ml
 - D. 1L
 - E. 50ml/kg

- * 58. Which of the following test is NOT recommended initially to evaluate for the presence of intraabdominal trauma in such a child
- A. Abdominal CT scan ✓
 - B. Liver function tests
 - C. Urinalysis ✓
 - D. Serum amylase ✓
 - E. Abdominal FAST scan ✓

59. The child is found to stabilise but have splenic laceration. Which is the best management option? - Splenic lacer
- A. Urgent operation and splenectomy ✓ Hb or injury emergency or splenectomy
 - B. Bed rest
 - C. Discharge for observation at home
 - D. Blood transfusion ✓
 - E. Anticoagulants

15 1

60. In resuscitating a child, the following is the recommended chest compression:breath ratio
- A. 15:2 ✓
 - B. 15:1 ✓
 - C. 30:2
 - D. 30:1 x adult ✓
 - E. 5:1

61. A six week infant is brought to hospital with projectile nonbilious vomiting. The doctor orders an ultrasound scan and confirms presence of pyloric stenosis. He then orders some laboratory tests. The following are possible findings EXCEPT

- A. Acidosis ✓
- B. Alkalosis
- C. Hypochloraemia
- D. Hyponatraemia
- E. Hypokalaemia

Vomiting = ↓ electrolytes
 = ↓ acid

* 62. A 12 year old girl complains of abdominal pain that started suddenly in the morning and has persisted 4 hours since. She is also vomiting and has not had any diarrhoea. She reports no change in appetite or dysuria. She is not febrile but is tender in suprapubic and left iliac fossa, and the tenderness is not migratory. Laboratory tests are ordered and white blood cell count is 8 and a CRP of 4. What is the most likely diagnosis?

- A. Appendicitis ✗
- B. Ovarian torsion ✗
- C. Merkel's diverticulitis ✓
- D. Constipation
- E. Mesenteric adenitis

63. Colonic pseudo obstruction is caused by all except

- A. Systemic illness ✓
- B. Electrolyte imbalance
- C. Faecal impaction ✓
- D. Opioids ✓
- E. Hypothyroidism ✓

64. An 18 year old girl is brought to the casualty with worsening severe abdominal pain which started 6 hours ago. Her abdomen is tender particularly in the lower abdomen and there is guarding. She also has a history of Chlamydia. She has tachycardic but her blood pressure is normal at 137/78. Which one of the following is the diagnosis you should confirm or rule out in this patient?

- A. Acute appendicitis
- B. Pelvic inflammatory disease ✓
- C. Acute intestinal obstruction ✗
- D. An ectopic pregnancy ✗
- E. Crohn's disease ✗

65. Which of the following is INCORRECT concerning colorectal carcinoma?
- A. Is the second most cause of cancer related death in western world?
 - B. A T1 N1 M0 stage III is equivalent to Duke stage C tumour
 - C. Majority of the cancers occur in the descending colon
 - D. Familial adenosis polyposis and HNPCC are two inherited causes of colon cancer ✓
 - E. Patient with primary Sclerosing cholangitis and ulcerative colitis have increased risk of developing colon cancer

66. Which ONE of the following is INCORRECT with regard to familial adenomatous polyposis.

- A. Account for about 1% of colorectal cancers ✓ *almost 100% in absence of surgical intervention*
- B. Is autosomal dominant inherited ✓
- C. Patient may develop extra colonic manifestation such as desmoids, epidermoid cysts and dental cysts. ✓
- D. Adenomas develop during teenage years of life will become malignant around the age of 20 ✗
- E. Treatment is with a subtotal colectomy ✓

67. All are important in the preoperative management of patients with jaundice except

- A. Vitamin K ✓
- B. Adequate hydration ✓
- C. Input-Output charts ✓
- D. Prophylactic antibiotics ✓
- E. Scrubbing of the surgical site in the ward

68. All are complications of cholelithiasis except.

- A. Cholangitis ✓
- B. Pancreatitis ✓
- C. Gall bladder abscess ✓
- D. Duodenal ulcers ✓
- E. Recurrent cho. ecystitis ✓

69. Carcinoma of the bladder:

- A. Is primarily of squamous cell origin. ~~X~~
- B. Is preferentially treated by radiation. ✓
- C. May be treated conservatively by use of intravesical agents even if it invades the bladder muscle. ~~X~~
- D. May mimic an acute UTI with irritability and hematuria. ~~X~~
- E. Is preferentially treated by partial cystectomy. ~~X~~

70. If torsion of the testicle is suspected, surgical exploration:

- A. Can be delayed 24 hours and limited to the affected side. ~~X~~
- B. Can be delayed but should include the asymptomatic side. ~~X~~
- C. Should be immediate and limited to the affected side. ~~X~~
- D. Should be immediate and include the asymptomatic side. ✓

71. A 22 year old female patient presents five days after laparoscopic appendectomy with fever and a rectal mass. What is the most likely diagnosis?

- A. Ruptured ectopic pregnancy ~~X~~
- B. Ischiorectal abscess ✓
- C. Pelvic abscess ~~X~~
- D. Ovarian cyst ~~X~~
- E. Uterine fibroids ~~X~~

72. The following investigations are appropriate prior to surgery

- A. An ECG in all patients older than 30 years ~~X~~
- B. Coagulation screen for all patients with obstructive jaundice ✓
- C. HIV screening for patients with acute appendicitis ~~X~~
- ~~X~~ D. Chest X-ray for all patients over 40 years ✓
- E. Liver function test for patients with acute appendicitis ~~X~~

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 73-77. CHOOSE THE MOST APPROPRIATE CHOICE FOR EACH STEM

- A. Familial adenomatous polyposis syndrome
- B. BRCA mutation
- C. Down's Syndrome
- D. MEN IIA → Medullary Ca of Thyroid
→ PCC, PTH
- F. Long-term immunosuppressive treatment after kidney transplant

- 73. 100% lifetime risk of colon cancer **A**
- 74. Increased risk of periampullary tumours **C**
- 75. Increased risk of bilateral breast cancer **BB**
- 76. Increased risk of pheochromocytoma **D**
- 77. Increased risk of Kaposi's sarcoma **E**

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 78-82. CHOOSE THE MOST APPROPRIATE CHOICE FOR EACH STEM.

- A. Left hemicolectomy
 - B. Anterior resection
 - C. Diverting ileostomy
 - D. Abdominoperineal resection
 - E. Right hemicolectomy
- 78. Rectal cancer 3 cm from the anal verge **D**
 - 79. Colon cancer at the rectosigmoid junction **A**
 - 80. Descending colon perforation at colonoscopy **DE**
 - 81. Consent for a permanent colostomy **B**
 - 82. Hepatic flexure tumour **E**

USE THE FOLLOWING CHOICES TO ANSWER QUESTIONS 83-87. CHOOSE THE MOST APPROPRIATE CHOICE FOR EACH STEM.

Q17 Radio

- A. Distended small bowel identifiable by the valvulae conniventes *small bowel obstruction*
- B. Coffee bean sign
- C. Modest amount of gas in the pelvis. ✓
- D. Peripheral, rather than central, distribution of gas.
- E. Prominent haustral markings ✓

- 83. Intussusceptions **B**
- 84. Sigmoid volvulus **D**
- 85. Small bowel obstruction **A**
- 86. "Closed-loop" obstruction of the colon **C**
- 87. Obstructing rectal cancer **E**

88. Rectal Juvenile polyps:
- A. Almost invariably undergo malignant change*
 - B. Occasionally persist into adult life***
 - C. Are pre-malignant ✓**
 - D. Are not associated with pain**
 - E. Are not associated with rectal bleeding*

89. Which statement with regards to breast cancer is TRUE?
- A. The commonest site of metastases is the contralateral breast*
 - B. Local spread to the chest wall occurs earlier in female patients than male patients*
 - C. Klinefelter's syndrome is a predisposing factor***
 - D. Inflammatory breast cancer is classified as locally advanced disease ✓
 - E. There is no role for neo-adjuvant chemotherapy*

90. Preservation of normothermia in surgical patients is important. All of the following are negative outcomes associated with perioperative hypothermia except?
- A. Coagulopathy *↑ bleeding* ✓
 - B. Wound infection ✓
 - C. Nosocomial pneumonia**
 - D. Myocardial ischaemia ✓
 - E. Delayed wound healing ✓

91. Which of the following is NOT a complication of urethral stricture?
- A. Retention of urine*
 - B. Urethral diverticulum*
 - C. Peyronie's disease ✓**
 - D. Peri-urethral abscess ✓
 - E. Urethral fistula ✓

92. Which of the following people can give a valid consent for elective surgery?

- A. A surgeon not involved in care of the patient ~~X~~
- B. The headmaster of a child in boarding school ~~X~~
- C. A patient who is under the influence of alcohol ~~X~~
- D. A magistrate for a minor whose parents decline life-saving surgery ✓
- E. A 14-year old ~~X~~

93. Kaposi's sarcoma:

- A. Is an X-linked recessive disease ~~X~~
- B. Can be treated with radiotherapy ✓
- C. Does not respond to chemotherapy ~~X~~
- D. Only affects people with AIDS ~~X~~
- E. Mainly affects the central nervous system ~~X~~

94. Regarding gastric carcinoma *which is not.*

- A. H. pylori is not known to be a risk factor ~~X~~ *↑ ulcers → precursors to gastric ca*
- B. Early gastric cancer is, even in the presence of nodal involvement have 90% 5 year survival
- C. Diffuse type in Lauren's classification have the best prognosis
- D. Troisier's sign is due to transperitoneal spread
- E. Sister Mary Joseph nodule is due to lymphatic spread

95. Regarding preoperative evaluation:

- A. There is no role for history and physical examination ~~X~~
- B. Chest x ray is useful in all circumstances ~~X~~
- C. Usefulness of hemogram is to avoid blood loss ~~X~~
- D. Post operative complications are a consideration ✓
- E. Comorbidities are an occasional consideration ~~X~~

96. The following are methods of managing Inguinal hernia except

- A. Mavays method
- B. Bassini's method
- C. Lichtenstein's method
- D. Lockwood ✓
- E. Shouldice method

want: Thrombolytic (Streptokinase) & heparin with total thrombectomy
 Pul embolectomy by open or immediate thrombolysis
 Venous thrombolysis
 prophylactic VC filter

97. A postoperative pulmonary embolus

- A. Is invariably associated with chest pain
- B. A chest x-ray is always normal
- C. Diagnosis can be confirmed by radioisotope ventilation/perfusion scans
- D. ECG may show Q wave in lead III.
- E. is rarely seen between 7 and 10 days after operation

may be pain femoropopliteal or deep femoral artery
 Types: Small emboli + pul. hts. / release of bronchospasm
 Medium → chest pain, hemoptysis, etc.
 Large → sudden chest pain, sudden dyspnoea, etc.
 (Westermarck sign)
 evidence of vte diagnosis by duplex ultrasonography

pulmonary angiogram 100% diagnostic

98. Phylloides tumour

- A. Is invariably a benign disease
- B. Modified radical mastectomy is the treatment of choice
- C. Commonly affect ages 20-30 years just like fibroadenoma
- D. Chemotherapy may not be useful
- E. Local recurrence are common than distance metastasis

Doppler US venography - 1k 20%
 15% to 20% distant metastasis
 Modified radical mastectomy (MRCM)
 Total mastectomy (TAM)
 40-50 years

99. Enterocutaneous fistula

- A. Always close spontaneously
- B. 250ml discharge from the fistula per day is considered low cut put
- C. Conventional therapy is surgery for the first phase
- D. Spontaneous causes include intestinal sepsis
- E. Fistulas with tracts longer than 2cm hardly closes

High cut put 250ml/day
 Low cut put 250ml/day
 70% close spontaneously
 10% malignant
 10% diverticular etc.
 Colonic resection +
 Reconnection by ileo-
 Pectus in 1st phase

* 100. Which of the following is true regarding malignant melanoma

- A. The most common type is nodular melanoma
- B. Breslow thickness is not a good prognostic factor
- C. Sentinel lymph node biopsy is not a means of assessing lymph node status in this disease
- D. Isolated limb perfusion with cytotoxic agents palliates recurrent limb disease
- E. Lentigo maligna is deep disease

Enterocutaneous fistula
 Phase 1 Reconnection +
 Restoration
 2. Investigate
 3. Reconnection
 4. Treatment

SURG

Registration No. 101114-107



UNIVERSITY OF NAIROBI

UNIVERSITY EXAMINATIONS 2017

LEVEL IV EXAMINATIONS FOR THE DEGREE OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY
HSU 400: SURGERY

DATE: MAY 24, 2017 THE DE NOVO PAPER

TIME: 2.00 P.M. - 5:00 P.M.

INSTRUCTIONS

Choose ONE correct answer.
Mark the correct answer on this question paper before transferring to the answer sheet.

1. The risk of colon cancer in an adenomatous polyp is related to all of the following factors EXCEPT

- a) Dysplasia ✓
- b) Number of polyps ✓
- c) Histological appearance ✓
- d) Size of polyp ✓
- e) Genetic predisposition ✓

* 2. In patients receiving massive blood transfusion for acute blood loss, which of the following is CORRECT?

- a) Packed red blood cells and crystalloid solution should be infused to restore oxygen-carrying capacity and intravascular volume. ✓
- b) Two units of FFP should be given with every 5 units of packed red blood cells in most cases. Six packs of platelet concentrate should be administered with every 10 units of packed red blood cells. ✓
- c) One to two ampules of 8.4% sodium bicarbonate should be administered with every 5 units of packed red blood cells to avoid acidosis. ✓
- d) One ampule of calcium chloride should be administered with every 5 units of packed red blood cells to avoid hypocalcaemia. ✓
- e) Whole blood and crystalloid solution should be infused to restore oxygen-carrying capacity and intravascular volume. ✓

3. Which one of the following statements is INCORRECT regarding surgical emphysema of the chest?

- a) It is a surgical emergency ✓
- b) It is iatrogenic after thoracic surgical procedures ✓
- c) It is a common complication in patients with chronic obstructive pulmonary disease (COPD) ✓
- d) A perforated oesophagus is a well-known cause of surgical emphysema ✓
- e) On a Chest radiograph it is noted as radiolucent areas within the subcutaneous tissue. ✓

AD/03

1

Colon ca.
Colon

Blood Transfusion

Surgical Emphysema

Asthma

* 4. A 49-year-old otherwise healthy man presented to the surgical clinic with complaints of a lump in his abdomen. On examination he was found to have a vertical midline mass measuring 5cm in diameter with a cough impulse and was more prominent as he sat up than when he recumbent. His abdomen is otherwise soft and non-tender and he has no line scars. What do you think this patient has?

- a) Umbilical hernia
- b) Epigastric hernia
- c) Inguinal hernia
- d) Divarification of the rectus
- e) All of the above

Which one of the following statements is INCORRECT regarding a Meckel's diverticulum:

- a) It is present in about 2% of the population
- b) It is at least 60cm from the ileocaecal junction 60cm / 20 feet
- c) It may contain heterotopic pancreatic and gastric tissue
- d) It is about two inches long
- e) It is a true diverticulum

2/2 defect
2 inches
20% heterotopic tissue

* 6. A 56-year-old man had an abdominoperineal resection for rectal cancer. He has a stoma in the left iliac fossa that has no pout and is flush to the skin. What kind of stoma does this patient have?

- a) Loop colostomy
- b) Mucous fistula
- c) End colostomy
- d) Ileostomy uprouted
- e) Double barrel colostomy

* 7. Which one of the following statements is FALSE in regard to hernias?

- a) Inguinal hernia lie superomedial to the pubic tubercle
- b) Femoral hernias lie inferolateral to the pubic tubercle
- c) Men are most likely to have femoral hernias than women
- d) The most common hernia in women are inguinal hernias
- e) Men are more likely to get inguinal hernias than women

Inguinal - 7 men
Femoral - 7 women

8. Capillary refill time is elicited by which of the following statements?

- a) Pressing over skin for ten seconds with normal return of perfusion (i.e. Pink) by 5 seconds
- b) Pressing over skin for five seconds with normal return of perfusion (i.e. Pink) by 3 seconds X delayed
- c) Pressing over skin for three seconds with normal return of perfusion (i.e. Pink) by 3 seconds
- d) Pressing over skin for ten seconds with normal return of perfusion (i.e. Pink) by 2 seconds
- e) Pressing over skin for five seconds with normal return of perfusion (i.e. Pink) by 2 seconds

9. Assessment of a breast lump includes all of the following EXCEPT?

- a) Lumpectomy
- b) Clinical examination
- c) Core biopsy
- d) Breast imaging
- e) Fine needle aspiration

Appendicitis

34. Which of the following types of patients do not have an increased risk of perforation in acute appendicitis?

- a) Extremes of age X ✓
 - b) Immunosuppressed X ✓
 - c) Diabetes mellitus X ✓
 - d) Pelvic position of appendix X ✓
 - e) Obese patient. ✓ → protection by fat.
- Previous abdominal surgery
Fistula Obstruction

Perianal abscess

35. Which of the following statements regarding perianal abscesses is TRUE?

- a) They present as a painful, throbbing swelling in the gluteal area. X anal region
- b) They are always associated with an underlying anal fistula. X in anal region
- c) Fistulotomy is advised if a fistula is found at the time of draining the abscess. X only experienced hands
- d) Treatment of abscess involves a cruciate incision over the most fluctuant point, de-roofing the cavity and finger curettage. ✓
- e) Finding Gram-positive organisms on culture is associated with an underlying anal fistula. X a-ve

⊙

36. Which of the following statements is FALSE regarding haematuria?

- a) Microscopic haematuria is not always abnormal. ✓
- b) Haematuria at the start of urinary stream indicates a cause in the lower urinary tract. ✓
- c) Haematuria where the urine is uniformly mixed with the urine points to a cause in the upper urinary tract. ✓
- d) Terminal haematuria is caused by bladder irritation or infection. ✓
- e) Painful haematuria indicates malignant pathology. ✓ Painless

Prostate

37. Which of the following statements is FALSE?

- a) The prostate is anatomically divided into a peripheral zone, a central zone and a transitional zone. ✓
- b) The glands of the peripheral zone are lined by transitional epithelium. ✓
- c) Benign prostatic hypertrophy occurs in the transitional zone. ✓
- d) Most carcinomas arise in the peripheral zone. ✓
- e) Denonvilliers' fascia separates the prostate from the rectum. ✓
Taka rectoprostatic fascia.

BPE

38. In benign prostatic hypertrophy (BPH) which of the following statements is TRUE?

- a) It is the commonest cause of bladder outflow obstruction in men > 70 years of age. ✓
- b) Decrease in serum testosterone levels and therefore relative increase in serum oestrogens cause BPH. ✓
- c) The condition affects the transitional zone and the central zone. ✓
- d) All lower urinary tract symptoms (LUTS) in men > 70 years are due to BPH. ✓
- e) The prostatic urethra is elongated. ✓

Prostate ca

39. On rectal examination, which of the following features do not suggest carcinoma?

- a) Nodules within the prostate ✓
 - b) Obliteration of the median sulcus ✓
 - c) Irregular stony hard induration ✓
 - d) Mobile rectal mucosa over the prostate ✓
 - e) Extension beyond the capsule into the bladder base. ✓
- immobile
prostatic

40. In rupture of the membranous urethra, which of the following statements is FALSE?

Urethra

- a) It is almost always associated with a pelvic fracture. ✓
- b) 10-15 per cent of fractured pelvis cases will have associated urethral injury. ✓
- c) It is usually a part of polytrauma. ✓
- d) The prostate may be high-riding and out of reach on rectal examination. ✓
- e) Urethral catheter inserted as a part of initial resuscitation. ✓

insert a supra-pubic catheter.

41. Which of the following statements about urethral stricture is FALSE?

Urethral stricture

- a) The symptoms are those of bladder outflow obstruction (BOO). ✓
- b) Ascending urethrography is necessary. ✓ or urethroscopy ✓
- c) Urethroscopy is mandatory to evaluate. ✓
- d) Perineal abscess is a complication. ✓ infection, bladder calculus, upper tract dilatation, diverticulum
- e) Urethral dilatation is the ideal treatment. ✓

Retrograde urethrogram, antegrade cystourethrogram

42. Which of the following statements on hypovolaemic shock is TRUE?

hypovolaemic shock

- a) Class I shock is equal to voluntary blood donation of one unit. ✓
- b) Class II shock is evidenced by change in vital signs and a significant decrease in systolic blood pressure. ✓
- c) Class III shock can be managed by simple administration of crystalloids only. ✓
- d) Class IV shock is evidenced by blood loss of less than 40% and is not life threatening. ✓
- e) In class II shock capillary return is more than two seconds. ✓

43. A 56-year-old woman presents with a two weeks history of increasing jaundice and pruritis. Further questioning reveals that she has vague epigastric pain radiating to the back for the last few months. On examination, the gall bladder is palpable with no obvious hepatomegaly. The most likely diagnosis is

- a) Cholangiocarcinoma ✓
- b) Adenocarcinoma of pancreas ✓
- c) Carcinoma of gall bladder ✓
- d) Adenocarcinoma of duodenum ✓
- e) Gallstone disease ✓

jaundice & pruritis, epigastric pain radiating to back

44. Which of the following factors present in an entero-cutaneous fistula increases the possibility of closure of the tract?

entero-cutaneous fistula

	Favourable	Unfavourable
a) Non-epithelialisation of the tract	Non epithelial tract	Epithelial tract
b) High output fistula	low out put	High out put
c) Malnutrition	Fistula tract < 2cm	Fistula tract > 2cm
d) Sepsis	Simple	Complex
e) Distal obstruction	Oropharyngeal	Presence of imperforate
	Ceopharyngeal	Distal obstruction
		Gastric type

45. Which of the following is true about Monteggia's fractures?

- a) It is usually associated with posterior interosseous nerve paralysis. ✓
- b) It can be usually treated conservatively in adults. ✓
- c) It is an injury of children. ✓
- d) It is a combination of fracture of radius with distal radio-ulnar joint dislocation. ✓
- e) It is a combination of fractures of proximal ulna with dislocation. ✓

Registration No. _____

Thyroidectomy

46. You are the intern covering the surgical floor for the night and the nurses ask you to review a patient who has had thyroidectomy earlier in the day. You notice that she has an anterior neck swelling and difficulty breathing. The next step of management will be:

- a) Open the wound immediately ✓
- b) Oro-tracheal intubation
- c) Wait and watch
- d) Oxygen by mask ✓
- e) Call the surgeon urgently

? Laryngeal oedema due to haematomas
adequate to relieve symptoms than intubate.

Appendicitis

47. Acute appendicitis is most commonly associated with which of the following signs?

- a) Temperature above 40°C. ✗
- b) Frequent loose stools ✗
- c) Anorexia, abdominal pain, and right lower quadrant tenderness ✓
- d) White blood cell count greater than 20,000 per mm³ ✗
- e) Palpable right iliac fossa mass ✗

Intussusception

48. A 6-month-old infant has a history of an acute onset of crampy abdominal pain and leg withdrawal of 12 hours' duration. Rectal examination shows red currant stool. Which of the following is the most likely diagnosis?

- a) Bleeding Meckel's diverticulum ✗
- b) Acute appendicitis ✗
- c) Kidney stone ✗
- d) Infected urachal cyst ✗
- e) Intussusception ✓

Testicular Torsion

49. A 14-year-old boy is brought to the emergency department with a 4-hour history of acute severe left scrotal pain. Examination reveals a high-riding testis with severe pain on palpation. Urinalysis does not reveal any evidence of red or white blood cells. Which of the following is the treatment of choice at this point?

- a) Heat, scrotal elevation, and antibiotics ✗
- b) Manual attempt at detorsion ✓
- c) Analgesics and re-examination ✗
- d) Doppler examination to assess testicular blood flow ✗
- e) Surgical exploration ✗

4 hour

> 6 hours

Oesophageal ca

50. A 70 year old man presents with a history of progressive dysphagia of solids initially to liquids and weight loss. On examination he is noted to have an enlarged left supraclavicular node. Which of the following investigations would confirm the diagnosis in this patient?

- a) Barium meal ✗
- b) CT scan abdomen ✗
- c) Barium swallow ✗
- d) Endoscopy with biopsy ✓ Oesophageal ca
- e) Ultrasound of the abdomen ✗

Breast

51. Which one of the following is TRUE regarding level 2 axillary lymph nodes in breast surgery?

- a) Lie anterior to the pectoralis minor ✗
- b) Lie inferior to the lower edge of the pectoralis minor ✗
- c) Lie posterior to pectoralis minor ✓ Level I
- d) Lie superomedial to pectoralis minor ✗ level III
- e) Lie inferior to pectoralis major ✗

* 52 A 30-year-old female presents to the casualty department with a history of right calf tenderness and gives a history of using oral contraceptives. A Doppler scan confirms a deep vein thrombosis. The most appropriate management plan for her would be?

Confirmed DVT

- a) Start her on warfarin ~~X~~
- b) Start her on IV heparin
- c) Start her on low molecular weight heparin \rightarrow prophylactic
- d) Call a senior consultant first to decide on anticoagulation ~~X~~
- e) None of the above ~~X~~

3. Which one of the following statements is INCORRECT in regards to sepsis?

- a) Tachycardia and tachypnoea are early signs
- b) Sepsis is defined as Systemic Inflammatory response syndrome in the setting of documented infection
- c) Leucocytosis or leucopaenia may be a sign
- d) Septic shock is defined as hypotension and sepsis

53. A 20-year-old man is brought in to the casualty department in respiratory distress after having been involved in a road traffic accident. On examination he is noted to have reduced air entry on auscultation on the left side of the chest with tracheal deviation to the right side. Which of the following is the most appropriate management option for this patient?

minor Pneumothorax

- a) A Chest X-ray ~~X~~
- b) CT scan of the chest ~~X~~
- c) Immediate intubation and ventilation \rightarrow The left lung not functional with hypoxia
- d) Decompression using a large bore needle to the left of the sternum
- e) Decompression using a large bore needle to the right of the sternum \rightarrow is on the left
- f) Insert a chest drain after needle thoracotomy ~~X~~

Tension Pneumothorax

* 55. A 24-year-old female presents to the surgical outpatient clinic with a history of palpitations, heat intolerance, weight loss. On examination you notice she has clammy skin, tachycardia and tachypnoea with exophthalmos and a large goitre. What is the most likely diagnosis?

Graves

- a) Graves disease
- b) Hashimoto thyroiditis ~~X~~
- c) Solitary thyroid nodule ~~X~~
- d) Toxic multinodular goitre ~~X~~
- e) De Quervain's thyroiditis ~~X~~

Hyperthyroidism

Which of the following statements is false about Hirschsprung's disease?

schizophrenic

- a) Male and females have equal incidence
- b) In approximately 8% of patients the entire colon is affected
- c) After surgery constipation is a common problem
- d) Down syndrome is presenting 3-5% of cases
- e) It is characterised by lack of ganglion cells in the Auerbach's and Meissner's plexus

HMF

100% 79%
Lunhamel procedure

57. A 25-year-old male is brought in by paramedics after having been involved in a road traffic accident. His initial BP at the scene was 80/40 mmHg with a pulse rate of 120 beats per minute. He was given two litres of saline and his current BP in the casualty is 110/70 mmHg. On examination he is noted to have left upper quadrant tenderness. What is the most appropriate next step in his management?

injury

- a) Undertake a full examination of the abdomen
- b) Shift him to ICU and observe ~~X~~
- c) Plan him for laparoscopy ~~X~~
- d) Take him for an exploratory laparotomy ~~X~~
- e) Give him whole blood ~~X~~

\rightarrow liver injury grades
I: laceration, parenchymal disruption $\leq 1-3$ cm in length
II: laceration > 7.5 cm or > 3 cm depth
III: hepatic avulsion

haematoma
I: subcapsular > 2 cm
II: capsular tear < 1 cm depth
III: subcapsular > 5 cm
IV: intraparenchymal > 10 cm depth
V: intraparenchymal haematoma
VI: laceration > 3 cm depth

*58. All of the following tests may be useful in the diagnosis of acute pancreatitis EXCEPT?

- a) Serum amylase ✓
- b) Serum lipase ✓
- c) Abdominal ultrasound *Amoxic*
- d) Serum amylase isoenzymes ✓
- e) Faecal fat ✓

Pancreatitis

59. What is the most common cause of significant upper gastrointestinal bleeding?

- a) Oesophageal varices ✓
- b) Mallory Weiss tears *A. 90*
- c) Peptic Ulcer disease *→ does not cause significant bleeding*
- d) Oesophagitis
- e) Dieulafoy lesions *→ abnormally large tortuous artery in the lining of GIT*

Upper GI bleed

*Ulcer
Erosive*

60. The following are useful corroborative signs of acute appendicitis.

- a) Referred pain in the right side with pressure on the left (Rovsi) ✓
- b) Relief of pain with elevation of testicle (Prehn's sign) ✓
- c) Production of pain in right lower abdomen with extension of thigh (Psoa's sign) ✓
- d) Production of pain in right abdomen with internal rotation of flexed thigh (Obturator's sign) ✓
- e) All of the above ✓

Appendicitis

*Rovsi
Psoa's
Obturator's
epididymo-orchitis
no pain relief*

61. After the infusion of 2000 ml of intravenous fluid following trauma, a patient's blood pressure is 110/70 mmHg. Which of the following findings would be the most clinical guide to adequate fluid resuscitation of this patient?

- a) Urine output greater than 30ml/hour ✓ *35-50 ml/hour / 0.5 ml/kg/day*
- b) Decrease in pulse to less than 100 beats/minute x
- c) Return of normal skin temperature x
- d) Return of normal sensorium x
- e) The disappearance of orthostatic hypotension x

*Resuscitation
IV fluids*

62. A 45 year old lady who has hysterectomy presents to the hospital with a two day history of abdominal pain, abdominal distension and vomiting. Plain abdominal radiograph shows a feature suggestive of intestinal obstruction. What is the most likely cause of the obstruction?

- a) Carcinoma of the colon x
- b) Small bowel tumour x
- c) Adhesions ✓ *→ due to prior hysterectomy*
- d) Incarcerated inguinal hernia x
- e) Diverticulitis x

*Intestinal
Obstruction*

63. A 21 year old male patient is brought to the emergency department for evaluation after a motor vehicle accident. As part of his secondary survey, he is found to have blood at the urethral meatus. What is the next step?

- a) Urethral Foley's catheter insertion followed by a cystogram x
- b) Suprapubic catheterization followed by a urethrogram ✓
- c) Intravenous pyelography (IVP) x
- d) CT scan of the pelvis x
- e) Diagnostic peritoneal lavage x

*Urethral
injuries*

* Patients with injuries with significant pneumo-haemothorax, the following

- a) Chest tube should be fixed at the 2nd ICS same side ✓
- b) Underwater seal drainage should be fixed on the same side 5th ICS anterior axillary line. ✓
- c) Prophylactic antibiotics may be of use after fixing the tube.
- d) The chest is not necessary. ✗
- e) None of the above.

In Intestinal stoma, which of the following statements is TRUE?

- a) Ileostomies should have a spout. ✓
- b) A right sided stoma is invariably an ileostomy. ✗
- c) A Hartmann's procedure involves resection of a segment of colon and formation of an ileostomy. ✗ *end colostomy*
- d) A loop ileostomy is usually permanent. ✗ *Temporary*
- e) A defunctioning stoma is performed to protect an anastomosis proximal to the stoma. *Distal*

total parenteral nutrition;

- a) Most common route administered via large central veins. ✗ *Distal*
- b) Is indicated in approximately 25% of patients in hospital requiring nutritional support.
- c) Is indicated for all patients with paralytic ileus. ✗
- d) Should be administered using an infusion pump. ✗
- e) May induce renal dysfunction.

67. In Obstructive jaundice;

- a) Percussion sound can readily reveal intra-hepatic ductal dilatation. ✗ *Abnormal*
- b) Obstructive jaundice is suggested by raised AST and ALT. ✗ *ALP ↑*
- c) Malabsorption of vitamin D in jaundiced patients can affect the synthesis of coagulation factors. ✓
- d) Endoscopic retrograde cholangio-pancreatography (ERCP) is of diagnostic and therapeutic value in jaundiced patients. ✓
- e) Pale urine and dark stools are suggestive of obstructive jaundice. ✗ *Pale stools, dark urine*

* Patients vary greatly in their requirement for postoperative analgesia. What is the best to assess adequacy of pain relief?

- a) Measure the degree of tachycardia.
- b) Ask the patient to measure the pain. ✓
- c) Assess the presence of hypertension.
- d) Look for tachypnoea.
- e) Examine for wound splinting.

* 69. In scrubbing, which of the following statements IS FALSE?

- a) If the surgeon has a suspected infected lesion, it is sprayed with iodine and covered with a sterile dressing before gloving. ✓
- b) The first scrub of the day should take about 5 min from start to drying. ✓
- c) A sterile scrubbing brush and nail cleaner are used for 1-2 min at the first scrub provided the surgeon stays within the theatre suite in between cases. ✓
- d) After applying disinfectant, the arms are washed from distal to proximal with hands up and elbows flexed. ✓
- e) Drying, using a towel for each side should start with the fingers and work across the hand and up the arm. ✓

70. In the immediate post operative period Which of the following statements are FALSE?
- a) Infusion and certain monitoring systems can cause complications. ✓
 - b) Abdominal surgical wounds may compromise postoperative respiratory function. ✓
 - c) The commonest cause of postoperative hypotension may be due to bleeding or insufficient fluid administration. ✓
 - d) Postoperative deep vein thrombosis (DVT) is classically diagnosed by Homan's well's score. ✓
 - e) Oliguria is defined as urinary output of less than 0.5 mL/kg per h. ✓

Post-op
w.c.

- * 71. Which of the following IS NOT a cause of acute shortness of breath on the first postoperative day?

Post-op

- a) Atelectasis ✓
- b) Pulmonary embolism ✓
- c) Myocardial infarction ✓
- d) Chest infection ✓
- e) Pneumothorax ✓

Day 1 Post-Op

MI, heart failure
PE
Chest inf.
Exacerbation of asthma

72. Which of the following statements regarding burn depth IS TRUE?
- a) The depth of a burn together with percentage of TBSA and smoke inhalation are key parameters in the assessment and management of a burn. ✓
 - b) Alkalis, including cement, usually result in superficial burns. ✓
 - c) Fat burns are deeper than electrical contact burns. ✓
 - d) Capillary filling is not present in superficial burns. ✓
 - e) Deep dermal burns take a maximum of 2 weeks to heal without surgery. ✓

Burns

Deep burns (worse than acid)

73. Which of the listed muscles does not control the rotator cuff?
- a) Supraspinatus ✓
 - b) Teres major ✓
 - c) Teres minor ✓
 - d) Infraspinatus ✓
 - e) Subscapularis ✓

74. Which of the following IS TRUE regarding 'burst abdomens'?
- a) The incidence is around 10-15 per cent. ✓
 - b) Midline and vertical incisions are more likely to burst than transverse incisions. ✓
 - c) Catgut is associated with a lower risk of burst abdomen. ✓
 - d) A serosanguinous discharge is the forerunner of disruption in almost all cases. ✓
 - e) Most cases are managed conservatively. ✓

Burst
abdomen

6-8 days post-op

higher ↑ caught + vomiting cause
mass closure is better than layer by layer
resuture w/ tension restores the tissue thickness of abdominal wall.

75. Which of the following statements IS TRUE?
- a) Peritonitis in perforated duodenal ulcer is initially sterile. ✓
 - b) Immunocompromised patients rarely present with opportunistic peritoneal infection. ✓
 - c) Bacteroides are sensitive to penicillin. ✓
 - d) In perforated duodenal ulcer there are no signs of peritonitis in the right iliac fossa. ✓
 - e) Children can localise infection effectively. ✓

Peptic ulcers

76. Which of the following IS TRUE with regard to the clinical feature of peptic ulcers?
- a) The pain never radiates to the back and this differentiates this from biliary colic. ✓
 - b) Vomiting is a notable feature. ✓
 - c) Bleeding is rare. ✓
 - d) They may cause gastric outlet obstruction. ✓
 - e) Weight loss is a typical symptom. ✓

chronic duodenal ulcer
gastric ca.

- * 77. The evaluation of a comatose patient with head injury begins with:-
- a) An urgent CT scan of the brain and C-spine with cervical immobilization
 - b) Urgent Neurosurgical consult for evacuation of any hematomas ✓
 - c) Complete neurological examination after a thorough history
 - d) Establishment of an airway ✓
 - e) All of the above ✓

Head injury

78. An epidural hematoma:-

- a) Should be suspected only in comatose patients ✓
- b) Most commonly presents following a lucid interval ✓
- c) Is usually accompanied by a skull fracture ✓
- d) Should always be urgently evacuated for good functional outcome of patients ✓
- e) Is usually as a result of venous bleed. *↳ Middle meningeal*

Head injury

* 79. Regarding secondary brain injury which one IS CORRECT?

- a) In using the Glasgow Coma scale, the higher the score the poorer the neurologic status ✓
- b) Corticosteroids are first line treatment for management of increased intracranial pressure ✓
- c) Intracranial hypertension is one of the most important factors affecting outcome ✓
- d) Systemic hypernatraemia leads to poor outcomes but hyponatraemia is tolerable ✓
- e) Cerebral perfusion pressure must be maintained within broad limits because too little pressure could cause brain tissue to become ischemic and too much could raise intracranial pressure ✓

Head injury

* A 15 year old boy is struck by a baseball on the side of the head. He loses consciousness briefly but regains it 5 minutes later. Which of the following is correct?

- a) If the patient has normal neurologic exam at assessment in the Accident and emergency, he can safely be discharged home ✓
- b) A CT scan should be performed regardless of the patient's neurologic state. ✓
- c) The patient who has rapid deterioration into coma with fixed and dilated pupils with decerebration, the most likely cause is a subdural hematoma. ✓
- d) The initial neurological exam may be dilatation of the ipsilateral pupil. ✓
- e) Film and is guardians need not be educated on warning signs and symptoms that may be indicative of a progressing injury. ✓

Head injury

81. Which of the following statements IS TRUE?

- a) Cranial osteomyelitis most frequently arises from the spread of bacteria through the bloodstream from an infection elsewhere in the body. *↳ eg otitis media*
- b) Bacterial meningitis may lead to hydrocephalus. *↳ Post opxn*
- c) Bacterial abscesses are difficult to visualize on CT scan and thus an MRI is required ✓
- d) Subdural empyema is usually treated by high dose antibiotics for 6 weeks without the need for surgical drainage ✓
- e) All of the above ✓

Neurology

Registration No. _____

82. Concerning the Glasgow coma scale:-

- a) Gives an accurate impression of neurologic status ✓
- b) Once assessed for the patient at admission it guides treatment and does not need to be repeated ✓
- c) An overall score of less than 8 negatively affects patient outcome ✓
- d) Cannot be assessed in an unconscious patient ✗
- e) Has minimal inter-observer variability ✗

Head injury

*83. Which of the following IS NOT indicative of cervical spinal cord injury?

- a) Flaccidity ✓
- b) Increased rectal tone ↓
- c) Diaphragmatic breathing ✓
- d) Priapism ✓
- e) Poor cough reflex ✓

Spinal cord injury

*84. Which of the following forms a part of the Cushing response to increased intracranial pressure?

- a) Tachycardia ✓ (bradycardia)
- b) Hypertension ✓
- c) Hyperventilation ✓ (irregular breathing ↓)
- d) Reduced level of consciousness ✗
- e) Imminent herniation is indicated.

↑ ICP =
HTN
Irregular breathing
↓ PR

*85. The most common cause of paediatric hydrocephalus in our setting.

- a) Congenital ✓
- b) Post-traumatic ✗
- c) Due to prematurity ✗
- d) Post-infectious - meningitis
- e) None of the above.

86. Symptoms of hydrocephalus in adulthood include

- a) Rapidly increasing head size ✓
- b) Bulging Fontanelle ✓
- c) Visual blurring ✓
- d) Cracked pot sign ✓
- e) Sunset eyes ✓

Hydrocephalus

87. The following list of primary malignancies accounts for the majority of metastatic brain tumors:

- a) Lung, breast, melanoma ✓
- b) Testis, ovary, melanoma
- c) Lung, prostate, uterus
- d) pancreas, melanoma, ovary
- e) Salivary gland, ovary, testis

Melanoma	40%
Lung	21%
GUT	11%
Osteosarcoma	10%
Breast	9%
Head & neck	6%
GI	3%
Lymphoma	1%

88. Brain tumors may present with

- a) Progressive neurologic deficits ✓
- b) Seizure ✓
- c) Non focal neurologic disorder ✓
- d) All of the above ✓
- e) None of the above ✗

Brain tumors

Registration No. _____

89. Spinal shock consists of all of the following EXCEPT

- a) Weakness ✓
- b) Hypotonia ✓
- c) Sensory loss ✓
- d) Areflexia ✓
- e) ~~Hyporeflexia~~ ✓

Paralytic
Hypotonia
Areflexia } < 24h

hypo

90. Features of headache due to increased ICP include all of the following EXCEPT

- a) Frontal ✓
- b) Episodic ✓
- c) Frequency more than once a day ✓
- d) Develops rapidly and subsides quickly ✓
- e) Associated with nausea or vomiting ✓

91. The most common tumor in the brain is

- a) Glioblastoma multiforme ✓
- b) Metastasis ✓
- c) Medulloblastoma
- d) Pleomorphic Xanthoastrocytoma
- e) Lymphoma

* 92. As regards Intussusception in children, all statements are false except:-

- a) More than 80% of the intussusceptions are ileo-ileal.
- b) Intussusceptions follow closely episodes of upper respiratory tract infections.
- c) The causation agent of the above is often an adenovirus. ✓
- d) Less than 50% of the cases of intussusceptions occur after 2 years of age.
- e) The incidence of leading point decreases with age of the patient.

Malignant melanoma is commonly seen on

- a) Foot ✓
- b) Head ✓
- c) Trunk ✓
- d) Scrotum
- e) None of the above

You are attached to ward 5B, when you meet Mr Majeika, a 50-year-old, otherwise healthy man. He has just had an abdominal operation 6 hrs previously. You note the following: he has a nasogastric tube that has drained 600 mL of gastric juices. His BP, temperature and pulse are normal. He has had 500 mL of intravenous saline since theatre. He has not passed urine and is not catheterised. He does not have an urge to pass urine. Use this information to answer questions 94-96

94. What is your diagnosis?

- a) Insufficient fluid intake ✓
- b) Sufficient fluid intake
- c) Hypovolaemia - vitals are (D)
- d) Renal failure
- e) Persistent intestinal obstruction

95. Which type of intravenous fluid would suit him?

- a) Normal saline
- b) Hartman's or lactated Ringer's solution ✓
- c) 5% dextrose solution
- d) Dextran 20
- e) Fluids should not be given since he is not passing urine ✗

96. What would be your most important recommendation?

- a) Catheterisation ✓
- b) Intravenous furosemide (Lasix) challenge at 40mg given slowly ✓
- c) Intravenous saline 500mL over 30-60 minutes ✓
- d) 5% dextrose 500mL over 30-60 minutes ✗
- e) Abdominal ultrasound scan to assess residual urine volume ✓

Use the following information to answer questions 97-99

Kiprop is a 30-year-old man admitted to the surgical ward with a 2-day history of worsening right abdominal pain and vomiting. It woke him up at night. He prefers to remain still to reduce the intensity of the pain. He is very tender in the right lower side of the abdomen. He is otherwise healthy.

97. What is the next best action?

- a) Proceed to do an appendicectomy ✗
- b) Do an abdominal ultrasound or x-ray ✓
- c) Give antibiotics
- d) Do Widal or typhoid tests, Brucella test, urinalysis, stool test, malaria test and HIV test
- e) Refer to Kenyatta National Hospital for special tests and treatment

98. While taking consent for appendicectomy, you inform the following information is true?

- a) All cases of appendicitis progress to perforate if not operated on ✗
- b) Laparoscopic appendicectomy is better than open appendicectomy
- c) The commonest complication of appendicectomy is wound infection ✓
- d) Not all patients with appendicitis will need antibiotics
- e) Histology of an obviously inflamed appendix is not necessary ✗

99. During surgery, the appendix was noted to be perforated. Which combination of antibiotics would suit him best?

- a) Amoxicillin/clavulanate, Ceftriaxone, Ciprofloxacin ✓
- b) Amoxicillin, Cefazolin, Metronidazole
- c) Amoxicillin/Clavulanate, Gentamicin, Metronidazole
- d) Ceftriaxone, Ciprofloxacin ✗
- e) Ciprofloxacin, Gentamicin, Amikacin ✗

100. A sinus produces a serous or purulent discharge. Which of the following are present EXCEPT:

- a) The cavity is inadequately drained ✓
- b) The cavity has not epithelialized ✓
- c) The cavity has undergone malignant change ✓
- d) There is a foreign body ✓
- e) There has been exposure to radiation ✓

14. Twenty-four hours after admission to the surgical intensive care unit (ICU), a postoperative patient is noted to have bright red blood through the nasogastric tube. All of the following have shown efficacy in preventing stress gastritis except:
- a. Sucralfate *(not prophylactic)*
 - b. Proton pump inhibitors
 - c. Enteral diet
 - d. Histamine-2 (H₂) receptor antagonists
- Routinely used - H₂ receptor antagonists + Sucralfate*

15. All of the following statements regarding complications of transfusions are false EXCEPT?

- a. Febrile reactions are rare
- b. Gram-positive organisms are the most common contaminants of stored blood
- c. Screening for minor antigens should be repeated every week when multiple transfusions are given
- d. A small amount (more than 0.1cc) of intravenous air is well tolerated
- e. Malaria, Chagas disease, human T-cell leukemia virus I, Human immune deficiency virus (AIDS) and hepatitis can be transmitted by blood transfusions

16. Which of the following pairing statements regarding daily fluid balance is incorrect?

- a. Daily water intake, 2000 to 2500 mL
- b. Average stool loss, 1000 mL *X (100 mL)*
- c. Average insensible loss, 600 mL
- d. Average urine volume, 800 to 1500 mL
- e. Average increase in insensible loss in a febrile patient, 250 mL/day for each degree of fever

17. Which of the following provides the main energy source during critical illness/injury?

- a. Skeletal muscle
- b. Liver
- c. Adipose tissue
- d. Kidney
- e. Gut

18. Regarding patients with rigid abdomen and free air in plain film, which one of the following statements is true?

- a. No further radiologic work up is required
- b. CT scanning with contrast enhancement is required to confirm the diagnosis
- c. Bedside sonographic imaging is preferred over CT imaging to confirm the diagnosis of the free air
- d. Narcotics are contraindicated in patients with an acute abdomen
- e. Preoperative prophylactic antibiotics are indicated in patients with free air

19. A 9 year old boy awakens with periumbilical abdominal pain followed by nonbilious vomiting. What is the most likely source of abdominal pain?

- a) Perforated ulcer
- b) Acute appendicitis
- c) Perforation following bowel obstruction
- d) Cholecystitis
- e) Diverticulitis

20. Spontaneous closure of which of the following congenital abnormalities of the abdominal wall generally occurs by the age of 4 years?

- a) Umbilical hernia *(May close spontaneously by age 4)*
- b) Patent urachus
- c) Patent omphalomesenteric duct
- d) Omphalocele
- e) Gastroschisis

21. A previously healthy 9 year old child comes to the emergency room because of fulminant upper gastrointestinal bleeding. The haemorrhage is most likely to be the result of

- a) Esophageal varices
- b) Mallory- Weiss syndrome
- c) Gastritis
- d) A gastric ulcer
- e) A duodenal ulcer

22. Correct statements concerning intussusception in infants include which of the following?

- a. Recurrence rates following treatment are high *(5-7% in non-op; 30% for op cases)*
- b. It is frequently preceded by a gastrointestinal viral illness *(Rotavirus)*
- c. A 1-to-2 week period of parenteral alimentation should precede surgical reduction when surgery is required
- d. Hydrostatic reduction without surgery rarely provides successful treatment
- e. The most common type occurs at the junction of the descending colon and sigmoid colon

23. For the purposes of "Chest Tube" insertion, which are the boundaries of the "safe triangle"?

- a) Lateral border of Pectoralis major, Mid-axillary line and the 5th intercostal space
- b) Anterior axillary line, posterior axillary line and the 4th intercostal space
- c) Anterior axillary line, mid axillary line and the 6th intercostal space
- d) Lateral border of Pectoralis major, Mid-axillary line and a line projected from the 5th intercostal space
- e) Lateral border of Pectoralis major, Posterior axillary line and the 6th intercostal space

24. The appropriate initial management for a tension pneumothorax is:

- a) Insert a peripheral venous cannula and give a bolus of colloid solution if the patient is in shock.
- b) Send the patient for a chest radiograph to confirm your clinical suspicion
- c) Insert a chest drain if the patient is in respiratory distress.
- d) Put a large needle into the 2nd intercostal space, mid-clavicular line on the affected side and then insert a chest drain on the affected side.
- e) Put a large needle into the 2nd intercostal space, mid-clavicular line on the opposite side and then insert a chest drain on the affected side.

- Had central and peripheral cyanosis that disappeared on oxygen therapy
- c) Coughed after breast feeding
 - d) Did not pass meconium within 24 hours of birth
 - e) If it had peripheral but not central cyanosis
- *26. The most useful thing to do to help diagnose a congenital heart defect in a neonate is:
- a) to do a chest radiograph
 - b) to pass a naso-gastric tube
 - c) to auscultate the chest
 - d) to palpate the peripheral pulses
 - e) apply pulse oximetry to the patient
27. For patients with a prosthetic mitral valve:
- a) The target INR is 2 to 3
 - b) The target INR is 2.5 to 3.5
 - c) An INR of 1.8 may be acceptable
 - d) You normally should not withhold warfarin for 3 to 4 days before surgical procedures
 - e) You should not start warfarin on post-operative day 1
28. For patients with a prosthetic aortic valve:
- a) The target INR is 2 to 3
 - b) The target INR is 2.5 to 3.5
 - c) An INR of 1.5 may be acceptable
 - d) You normally should not withhold warfarin for 3 to 4 days before surgical procedures
 - e) You would normally start warfarin on the 3rd postoperative day
29. In patients with peripheral arterial disease:
- a) Surgery is the treatment of choice for the majority of patients
 - b) Most patients may be managed conservatively
 - c) Exercise is contraindicated
 - d) Venous disease is an indication for amputation
 - e) Swelling of the limb is a prominent feature
30. In venous disease of the lower limb:
- a) Varicose veins contribute significantly to swelling of the limb
 - b) One can safely perform varicose vein surgery without investigation of the deep venous system
 - c) Pain is a prominent feature in the medical history
 - d) Bilateral swelling of the limbs is the usual presentation
 - e) Most patients are adequately managed by compression dressings or stockings
31. In lymphatic disease of the lower limbs:
- a) Swelling of the limbs is worse in the mornings
 - b) The definitive treatment is usually surgery
 - c) Compression stockings are the mainstay of management
 - d) Pain is a common complaint
 - e) Woody oedema is not a feature

- a) often resolves after chest tube drainage, if diagnosed early
 - b) often requires prolonged chest tube drainage, even if diagnosed early
 - c) rarely requires decortication if diagnosed late
 - d) Only requires antibiotics if diagnosed early
 - e) Usually requires a thoractomy for optimal treatment
33. A 13 year old girl is scheduled for elective splenectomy. Preoperative evaluation shows the presence of mild to moderate hypothyroidism. Select the next most appropriate action:
- a) Proceed with surgery with the knowledge that minor perioperative complications could develop.
 - b) Postpone surgery until a euthyroid state is achieved
 - c) Proceed with surgery while beginning treatment with levothyroxine
 - d) Proceed with surgery while beginning treatment with thionamides
 - e) Proceed with surgery if severe clinical symptoms are not present.
34. Regarding peritonitis, which of the following statements is not true?
- a) Primary peritonitis is more common in children with nephrosis and adults with cirrhosis than with patients without such conditions
 - b) Primary peritonitis is usually monomicrobial
 - c) Chemical peritonitis often precedes bacteria contamination
 - d) Multiple organisms are commonly cultured from peritoneal dialysis catheters
 - e) Tuberculosis peritonitis has an insidious onset
35. Small bowel obstruction
- a) Is more severe in onset when the cause is distal.
 - b) If caused by adhesions, should be treated initially by nasogastric suction and intravenous fluids
 - c) Is usually caused by adenocarcinoma
 - d) With distension is mainly caused by excretion of fluid into the lumen
 - e) Shows haustra on a plain film
36. Causes of post-operative fever include all of the following EXCEPT
- a) Subphrenic abscess
 - b) Deep venous Thrombosis
 - c) Urinary tract infection
 - d) Atelectasis
 - e) Blood transfusion
37. Factors predisposing to wound infection includes all of the following EXCEPT
- a) inadequate haemostasis
 - b) Prolonged operation
 - c) Diabetes
 - d) Obstructive Jaundice
 - e) Malnutrition

38. The following factors may adversely affect the healing of wounds EXCEPT

- a) Exposure to ultraviolet light
- ~~b) Obstructive Jaundice~~
- c) Advanced neoplasm
- d) Exposure to ionising radiation
- e) Infection

39. Which of the following statements is INCORRECT regarding burn injuries

- ~~a) Those involving 20% of body surface area can be managed by daily dressing at any health centre~~
- b) Those involving the chest may require escharectomy ✓
- c) Of partial thickness are often painless, but needle pricks can usually be felt
- d) Parklands formula should be used to estimate fluid replacement within the first 24 hours ✓
- e) Those involving the head and neck have the lowest mortality rate ✓

40. When a casualty has severe facial injuries, which is the inappropriate response?

- ~~a) An immediate danger to life is blood loss~~
- b) Transport to the casualty department should be in the supine position
- c) Airway obstruction can occur due to inhaled blood
- d) Surgical cricothyroidectomy may be required due to oedema
- ~~e) Cervical spine injury should be considered after securing a definitive airway~~

41. Severe head injury may be associated with all of the following EXCEPT

- a) Raised systolic blood pressure
 - ~~b) No evidence of damage on CT scan~~
 - c) Secondary injury due to tissue hypoxia
 - d) Glasgow coma scale of 8 ✓
 - e) Vomiting ✓
- Cushing's reflex*
** Hypertension*
** Bradycardia*
** Irregular RR*

42. Regarding Intestinal obstruction, the following are cardinal symptoms and signs, EXCEPT

- a) Abdominal distension ✓
 - b) Abdominal pain ✓
 - ~~c) Increased peristalsis~~
 - d) Vomiting ✓
 - e) Constipation ✓
- 4 cardinal signs & symptoms*
- Pain
- Vomiting
- Obstruction / absolute constipation
- Distention

43. Which of the following muscles do not form the posterior relation of the breast?

- a) Pectoralis major
- b) Serratus anterior
- ~~c) Rectus abdominis~~
- d) Latissimus dorsi
- e) None of the above

44. Minimum number of lymph nodes to be dissected in axillary sampling in breast conservation surgery is

- a) 2
 - b) 3
 - ~~c) 4~~
 - d) 5
 - e) 6
- avoids complete disruption to axillary lymph drainage. ↓ risk of lymphoedema*
Mastectomy

45. In breast reconstructive surgery after mastectomy, which of the following is not true regarding TRAM flap

- a) TRAM flap may be based on a pedicled superior epigastric artery
- b) TRAM flap can be transferred as a free flap *using the superior pedicle.*
- c) It is a type of myocutaneous flap
- ~~d) It uses supra-umbilical fat & rectus abdominis muscle.~~
- e) None of the above

46. NOT a true statement regarding breast implants

- a) They are made of silicone shell filled with either saline or silicone gel
- b) Silicone gel filled implants provide a more natural shape
- c) Silicone gel filled implants became controversial because of risk of associated malignancy
- ~~d) In case of rupture of implants, silicone gel may get absorbed in axillary lymph nodes.~~
- e) All of the above

47. What is the vertical extension of the thyroid gland in relation to the vertebrae

- a) C4 - T1
- ~~b) C5 - T1~~
- c) C6 - T1
- d) C3 - T1
- e) C2 - T1

48. Screening method for medullary carcinoma of thyroid include:

- ~~a) Serum calcitonin~~
- b) Serum calcium
- c) Serum ALP
- d) Serum acid phosphatase
- e) Serum CEA

49. Medullary Carcinoma of thyroid arises from?

- ~~a) Para follicular cells~~
- b) Cells lining the acini
- c) Capsule of thyroid
- d) Stroma of the gland
- e) All of the above

50. An 18-year old man is admitted to the emergency room following a motorcycle accident. He is alert and fully oriented, but witnesses to the accident report an interval of unresponsiveness following the injury, skull films disclose a fracture of the left temporal bone. Following X-ray, the patient suddenly loses consciousness and dilation of the left pupil is noted. This patient should be considered to have:

- a) Ruptured berry aneurysm
- b) Acute subdural hematoma
- ~~c) Epidural hematoma~~
- d) Intra-abdominal hemorrhage
- e) Ruptured arteriovenous malformation

- d) The second metatarsal
- e) The fifth metatarsal

52. Volkman's ischemic contracture is associated with:-

- a) Inter-trochanteric femoral fracture
- b) Supra-condylar fracture of the humerus
- c) Posterior dislocation of the knee
- d) Traumatic shoulder separation
- e) Colles "silver fork" fracture

53. The most severe epiphyseal growth disturbance is likely to result from which of the following types of fracture?

- a) Fracture dislocation of a joint adjacent to an epiphysis
- b) Fracture through the articular cartilage extending into the epiphysis
- c) Transverse fracture of the bone shaft on the metaphyseal side of the epiphysis
- d) Separation of the epiphysis at the diaphyseal side of the growth plate
- e) Crushing injury compressing the growth plate

54. Which of the following statement is true regarding the thoracic outlet syndrome?

- a) It is associated with cervical spine disk disease
- b) It is reliably diagnosed by positional obliteration of the radial pulse
- c) If conservative measures fail, it is best treated by surgical decompression of the brachial plexus
- d) It most commonly affects the median nerve
- e) It can be reliably ruled out by angiography

55. Regarding the ocular features of tuberculosis, one of the following is not true:-

- a) Most of the lesions are immune-related
- b) Uveitis is the most common manifestation
- c) Phlyctenulosis (Phlyctenular keratoconjunctivitis) has allergic origin
- d) Primary infective keratitis is rare
- e) Uveitis in these patients responds well to steroids

56. Which of the following statements concerning carcinoma of the oesophagus is true?

- a) Alcohol has been implicated as a precipitating factor
- b) Squamous carcinoma is the most common type at the cardio-oesophageal junction
- c) It has a higher incidence in males
- d) It occurs more commonly in patients with corrosive esophagitis
- e) Surgical excision is the only effective treatment

57. Which of the following fractures or dislocations of the extremities induced by blunt trauma is associated with significant vascular injuries?

- a) Knee dislocation
- b) Closed posterior elbow dislocation
- c) Mid-clavicular fracture
- d) Supra-condylar femur fracture
- e) Tibial plateau fracture

anaerobes

- b) Avoidance of oral antibiotics to prevent emergence of Clostridium difficile
- c) Mechanical bowel preparation and appropriate pre-operative antibiotics
- d) Postoperative administration for 5-7 days of parenteral antibiotics effective against aerobes and anaerobes
- e) Operative time less than 5 hours

59. Which of the following statement concerning nasopharyngeal cancer is true?

- a) It has an unusually high incidence among Chinese
- b) It occurs primarily after the sixth decade of life
- c) It undergoes early metastasis to the lungs
- d) The treatment of choice is wide surgical excision of the primary tumor
- e) Initial evaluation should involve a biopsy of the primary tumor and neck nodes

60. One of the following is true of a greenstick fracture:-

- a) It always communicates with the exterior
- b) It only involves the forearm bones
- c) It is incomplete
- d) Manipulation under anaesthesia is always necessary
- e) The best treatment is by open reduction and fixation

61. Colles's fracture is NOT commonly associated with one of the following:-

- a) Osteoporosis
- b) Osteopetrosis
- c) Elderly ladies
- d) Dinner fork deformity
- e) A fall on the outstretched hand

62. A patient reporting to the outpatient department with severe low back pain should have the following as the best first line of investigation:

- a) MRI
- b) CT scan
- c) Plain X-rays
- d) Total body isotopic scan
- e) Ultrasound scan

63. Tuberculosis of the spine is true in all of the following EXCEPT?

- a) Always associated with Human Immunodeficiency Virus
- b) Affects all age groups
- c) Erythrocyte sedimentation rate can be used in its management
- d) Muscle charts are useful in the management
- e) Is common at the thoracolumbar junction

SAL IIR
HARRIS OF
I plate
5-Ship
A-Abate II
-Lowel III
-Through
2 med - crushed

45% are non-regen in origin

Monteggia-Ulnar

- a) Fracture neck of femur
- b) Fracture of distal radius
- c) Fracture of second metatarsal
- d) Fracture thoracic vertebra
- e) Fracture of clavicle

65. In sickle cell disease the commonest organism causing osteomyelitis is:

- a) Haemophilus influenza
- b) Streptococcus pneumoniae
- c) Salmonella species
- d) Streptococcus pyogenes
- e) Staphylococcus aureus

66. Which of the following is NOT a procedure on joints?

- a) Tenodesis
- b) Arthrolysis
- c) Arthroscopy
- d) Aspiration
- e) Arthrodesis

67. Osteogenic sarcoma has all the following except:

- a) Elevated alkaline phosphatase
- b) Codman's triangle
- c) Predilection for the ends of long bone
- d) Metastases through the lymphatics *Haematogenous*
- e) Expression of P-Glycoprotein

68. Fractures of the ankle in an adult should be immobilized in a cast for:

- a) Six weeks
- b) Four weeks
- c) Three weeks
- d) Eight weeks
- e) Twelve weeks

69. Skull traction is indicated in the following injuries EXCEPT?

- a) Thoracic vertebra 4 fracture
- b) C4 fracture
- c) C4C5 intrafacet dislocation
- d) C4C5 bifacet dislocation
- e) C3 wedge compression fracture

70. Which of the following is not a feature in acute osteomyelitis:

- a) Periosteal reaction
- b) Fever
- c) Raised ESR
- d) Raised CRP
- e) Swelling

71. Which of the following is NOT a cause of non-union of fractures?

- a) Infection
- b) Minor movements
- c) Interposition
- d) Poor blood supply
- e) Large gap between fragment

72. Which of the following is NOT a treatment of non-union?

- a) Electric stimulation
- b) Bone grafting
- c) Ilizarov apparatus
- d) Isotopic radioactive calcium scans
- e) Compression plating of the fragments

73. A patient who has the following injuries is classified as a patient with multiple injuries:

- a) Fracture of the skull and subdural haematoma
- b) Fracture of the femur and haemopneumothorax
- c) Fractures of the ribs and haemothorax
- d) Fracture of the femur, tibia and humerus
- e) None of the above

74. Patient who complains of pain in the heel of the foot when he starts to walk in the morning is likely to have

- a) A bunion
- b) Hallux rigidus
- c) Plantar fasciitis
- d) Pes planus
- e) Tarsal tunnel syndrome

75. Which of the following is the commonest cause of infection in the hand

- a) Staph. aureus
- b) Strep. pyogenes
- c) E. coli
- d) Salmonella typhimurium
- e) Clostridium welchii

76. The following is characteristic of ureteric colic secondary to urinary stone

- a) The pain intensity is not commensurate with the site and degree of obstruction
- b) The impacted ureteral stone may result in the classical loin to groin type of pain
- c) The referred pain to the groin is via the iliohypogastric nerve
- d) During the ureteric pain episode the patient is usually afraid of any movement
- e) The PUJ stone impaction may not necessarily be confused with loin muscle spasm

77. A 40 year old man presents with acute intestinal obstruction. Which of the following is the most useful in diagnosing generalized peritonitis?

- a) Abdominal rigidity
- b) Rebound tenderness
- c) Effect on the pain after 2 hours of gastrointestinal suction
- d) Abdominal x-rays films
- e) Elevated white blood cell count

fracture involving multiple sites

- c) A urinary catheter should be inserted if the patient is unconscious
- d) A normal lateral cervical spine X-ray excludes a cervical spine injury
- e) Nasotracheal intubation should be undertaken in apnoeic patient

79. The following is NOT an indication for colostomy

- a) Rectal atresia ✓
- b) Rectal prolapse ✓
- c) Imperforate anus ✓
- d) Sigmoid volvulus ✓
- e) Carcinoma of the rectum ✓

80. Benign strictures of the esophagus may be treated by all of the following EXCEPT:-

- a) Bougie dilatation
- b) Self expanding metal stent
- c) Bingham gastroplasty
- d) Total gastrectomy ✓
- e) Colon interposition - graft from the colon

81. The commonest cause of dysphagia in adults is:-

- a) Carcinoma of the esophagus ✓
- b) Achalasia
- c) Sliding hiatus hernia
- d) Paraesophageal hernia
- e) Esophageal diverticulum

82. A boy of 17 years got injured on the scrotum while playing football. Now he has pain and swelling of left hemiscrotum. At casualty, the most important action to be done will be

- a) Doppler ultrasound of the scrotum ✓
- b) Sedate the patient and aspirate the haematoma
- c) Plain X-ray of the pelvis
- d) Pass catheter and get urine for mid stream specimen of urine
- e) Sedate and admit to the ward

83. A motorist gets involved in a road traffic accident. He is admitted to the ward after failing to pass urine. Plain X-rays of the pelvis show bilateral fracture superior pubic rami. What is the best immediate management?

- a) Fixation of the bony fractures alone
- b) Catheterisation per urethra after cysto-urethroscopy ✓
- c) Fixation of cysto-fix (Cystostomy)
- d) Pelvis bone fixation and urethral catheterization
- e) Exploration and possible urethroplasty

- a) Perforated ulcer
- b) Acute appendicitis
- c) Perforation following bowel obstruction
- d) Cholecystitis
- e) Diverticulitis ✓

84. A 35-year-old woman experiences an acute onset of epigastric and right upper quadrant pain several hours after a large dinner. She has had similar episodes in the past that resolved after a few hours. This episode persists, and she has fever and non-bilious vomiting. What is the most likely source of the abdominal pain? D

85. A 60-year-old man with chronic alcoholism awakens at 3:00 a.m. with severe, sharp epigastric pain that 3 hours later becomes diffuse abdominal pain. What is the most likely source of the abdominal pain? A

86. A 55-year-old man with a 2-day history of abdominal distention, vomiting, crampy abdominal pain, obstipation and is experiencing severe, diffuse abdominal pain. What is the most likely source of the abdominal pain? C

87. A 22-year-old man awakens with periumbilical abdominal pain followed by non-bilious vomiting. What is the most likely source of the abdominal pain? B

88. A 65-year-old man with a history of chronic constipation has a 3-day history of abdominal distention without a bowel movement. He has fever and abdominal rigidity. What is the most likely source of the abdominal pain? C

89. True statements regarding squamous cell carcinoma of the lip include:-

- a) The lesion often arises in areas of hyperkeratosis
- b) More than 90% of cases occur on the upper lip (25% → upper lip) - male predominant - lower lip common
- c) The lesion constitutes 30% of all the cancers of the oral cavity
- d) Radiotherapy is considered appropriate treatment for these lesions (= 90% cure rate) - Ant. Tripling G.
- e) Initially metastases are to the ipsilateral posterior cervical lymph nodes

90. Congenital absence of a limb is known as

- a) Amelia ✓
- b) Complete hemimelia
- c) Partial hemimelia
- d) Lamelia
- e) Phocomelia

91. Closed fracture through the scaphoid may be at risk of:-

- a) Infection
- b) Haemorrhagic shock
- c) Nerve injury
- d) Vessel injury
- e) Avascular necrosis ✓

92. Which of the following tests is used to evaluate for integrity of the Anterior Cruciate Ligament;

- a) Anterior Drawers test
- b) Posterior Drawers test
- c) Varus stress test
- d) Valgus stress test
- e) Ortolanis test

93. Pott's paraplegia is due to spinal:

- a) Trauma
- b) Tuberculosis
- c) Deformity
- d) Tumor
- e) Spondylosis

94. In Radial nerve palsy, which of the following deformities is observed:

- a) Foot drop
- b) Ape hand
- c) Claw hand
- d) Wrist drop
- e) Intrinsic plus

95. The articulation between C1 and C2 is primarily specialised for:

- a) Flexion only } *Atlanto-occipital*
- b) Extension only }
- c) Lateral flexion only } *Atlanto-axial*
- d) Forward flexion only
- e) All of the above

96. The carpal arch and the flexor retinaculum together are known as:

- a) Carpal canal
- b) Carpal tunnel
- c) Palmar tunnel
- d) Palmar canal
- e) Palmar arch

97. Which of the following is NOT a method of traction

- a) Gardens
- b) Gallows
- c) Bryant
- d) Perkins
- e) Hamilton-Russel

98. The gold standard treatment of chronic osteomyelitis of femur diaphysis is:

- a) Outpatient parenteral antibiotics.
- b) Surgical debridement
- c) Biological toiling
- d) Oral antibiotic
- e) None of the above.

99. The most subtle radiological sign of developmental dysplasia of hip is?

- a) V-shaped tear drop
- b) Abnormal soral line.
- c) Shallow acetabular.
- d) black-jack thorn sign.
- e) Valgus femoral neck.

100. Which of the following is a classification system for open fractures:

- a) Gartlands
- b) Weber
- c) Gustilo-Anderson
- d) Garden's
- e) Pauwels