

Al Azhar University-Gaza

Introduction to clinical medicine I (SURGERY)

DEC 2013

Student's Name: Student's Number:

Choose the Best appropriate answer in each of the following questions:

1. Intermittent claudications

- a. Is a muscle cramp in the leg
- b. Increased by rest
- c. Present at the start of exercise
- d. Occur after walking 300 meters
- e. **Is a cramp in group of muscles supplied by certain artery**

2. Rest pain

- a. Usually situated proximally
- b. Decrease at night
- c. **Affects men more than women**
- d. Relieved by exercise
- e. Non of the above

3. Healing by first intention

- a. Wound edges are not opposed
- b. Heals slowly
- c. **Leaves minimal scar**
- d. Less susceptible for infection
- e. All the above

4. Hypertrophic scar

- a. Spreads to normal tissue
- b. Extends beyond the boundaries of the original incision
- c. Most common spots are earlobes
- d. **common in the young**
- e. All the above

5. Which of the following is not a problem of surgery on obese patient

- a. Difficulty intubating and ? Aspiration
- b. Respiratory compromise
- c. Myocardial arrhythmia
- d. Deep vein thrombosis & pulmonary embolism
- e. Poor wound healing/infection

6. The following factors affects wound healing except ✓ A-D-C...

- a. Site of the wound
- b. Structures involved
- c. Nutrition status
- d. vit k & b ?!
- e. Oxygen

7. Indications of drain insertion includes all the following except

- a. Abscess cavity
- b. Secure anastomosis
- c. Anticipated leakage
- d. After trauma
- e. Generalized peritonitis

8. Acute Epidural haematoma

- a. Due to middle meningeal artery tear
- b. Can be treated conservatively
- c. Classically there is contra lateral, dilated, fixed pupil
- d. Needs operation within 24 hours
- e. a and c only

9. Indications for CT scan in head injuries includes all the following except

- a. Focal neurological deficit
- b. Known period of unconsciousness
- c. Deterioration of level of consciousness
- d. Penetrating injuries.
- e. GCS score > 13

10. Regarding Tension pneumothorax all the following are true except

- a. More common with blunt trauma
- b. Ball valve effect of pleural injury

- c. Affect the venous return in the SVC
- d. Causes mediastinal shift to same side
- e. Clinical diagnosis

11. Massive hemothorax

- a. Defined as presence of about 700ml of blood in the pleural cavity
- b. Due to injury to pulmonary vessels
- c. The neck veins usually distended
- d. Breath sounds are increased
- e. All the

12. which of the following is not absorbable suture

- a. Dexon (Polyglycolic acid)
- b. Cat gut
- c. Plain gut
- d. Polydextron suture
- e. Polypropylene

13. Carbuncle

- a. Is a confluence of several boils
- b. Usually cause minimal tissue destruction,
- c. Has one opening
- d. Streptococcus is the commonest organism
- e. Commonest site is the abdominal wall

14. Prophylactic antibiotics

- a. Should be given one day before the operation
- b. Should be given by intramuscular injection
- c. Usually narrow spectrum
- d. Usually stopped 24hours after the operation
- e. None of the above

15. Clinical picture of varicose veins includes all the following except: e or a

- a. Difficulty in standing
- b. Heaviness & fullness in legs
- c. Ankle swelling at the end of day
- d. Itching
- e. Night cramps or claudications

16. Indications for pre operative catheterization :

- a. Patient at risk of renal failure
- b. patient require prolonged IV therapy
- c. All pelvic operations
- d. a & b only
- e. All the above

17 . Indications for ICU admission is/ are

- a. Respiratory for ventilation
- b. Cardiac for inotropic support
- c. Neurological intracranial pressure monitoring
- d. All the above
- e. A and c only

18 . Regarding blood loss and needs during surgery

- a. Blood loss during surgery up to 1.5 L will result in moderate tachycardia and drop of BP
- b. Blood loss > 500ml should be replaced
- c. Measurement of blood loss by swab weighing
- d. All the above
- e. b and c only

19 . Post op pain relief is essential for all the following except

- a. Patient satisfaction
- b. Adequate respiration
- c. Effective coughing
- d. Early mobilization
- e. Wound healing

20. Papillary carcinoma of the thyroid

- a. Is the tumor of children & young adults
- b. Is the tumor of adults & ages 20-50 y
- c. Usually above 50years but can be familial
- d. Lymph node metastases is late
- e. Blood metastases is early

21. Regarding pilonidal sinus all the following are true except

- a. Appears at 20-30 y of age
- b. Male: female ratio is 3:1.
- c. May be asymptomatic
- d. Hairs lie loosely in the sinus
- e. Tract lining is columnar epithelium and granulations

22. A 50 y old female patient taking oral hypoglycemic for her newly discovered Diabetes mellitus is scheduled for excision of breast lump next morning , your instructions will be

- a. Omit her morning dose of medication ✓
- b. ~~late~~ surgery **early**
- c. Start heparin treatment when she starts eating
- d. Start 5%v dextrose solution with 10 units heparine
- e. All the above **insulin**

23. The following is not high risk group for DVT except

- a. Recent DVT OR PE, **thx**
- b. Major abdominal or pelvic operations ✓
- c. Hip prosthesis operations ✓
- d. Obesity in patient > 40y **moderate**
- e. Multiple trauma patients

24. Regarding obstructive jaundice

- a. Caused by hemolytic anaemia
- b. Urobilinogen is absent in the urine
- c. Carcinoma of the head of pancreas is the commonest cause
- d. dark color stool color stool and urine
- e. b and c only

25. Regarding Necrotizing fasciitis all the following are true except

- a. 80% have a history of previous trauma or infection
- b. Over 60% commence in abdominal wall **[rare]...**
- c. Is a surgical emergency
- d. Results from a polymicrobial, synergistic infection
- e. There is disproportionate pain in relation to the clinical findings

26 . Hypovolaemic shock is associated with all of the following except:

- a. High cardiac output ✓
- b. Low venous pressure ✓
- c. High vascular resistance **↑VC**
- d. High base deficit
- e. Cold clammy sweating ✓

27. Shock can best be defined as:

- a. Hypotension.
- b. Hypoperfusion of tissues to meet the minimal requirements
- c. Hypoxemia.
- d. All of the above

28. Which of the following is not an action of angiotensin II?

- a. aldosterone secretion ✓
- b. sodium absorption ✓ [Na⁺ - H₂O reabsorption]...
- c. efferent arteriolar constriction ✓
- d. arterial dilation
- e. nephrosclerosis in the kidney

29. Features of inflammatory response syndrome (SIRS) include the following except:

- a. Temperature > 38.4°C ✓
- b. Temperature < 34.6°C ✓
- c. WCC < 4,000 cells per ml ✓
- d. Respiratory rate > 20 per minute ✓
- e. PCO₂ > 32 mmHg < 32.

30. All regarding the flow phase after injury is true Except :

- a. Glucagon breaks down glycogen stores
- b. hepatocytes produce glucose (gluconeogenesis).
- c. fat breakdown occurs as a result of catecholamine stimulation.
- d. growth hormone levels are elevated.
- e. hypoglycemia result as tissues deplete blood glucose stores.

31. In "catabolic" surgical patients, which of the following changes in body composition do not occur? ↑ Basal metabolic rate

- a. Lean body mass increases.
- b. Total body water increases.
- c. Adipose tissue decreases. ✓
- d. Body weight decreases. ✓

32. In response to trauma:

- a. The ebb (early flow phase) phase could not exist
- b. Catabolism is the only feature of the high flow phase
- c. The acute injury phase usually lasts six hours postoperatively
- d. loss of appetite is the main feature of the anabolic phase
- e. none of the above

33. Secondary hyperparathyroidism is caused by:

- a. Parathyroid adenoma
- b. Parathyroid carcinoma
- c. MEN 1
- d. Thyrotoxicosis
- e. **Chronic Renal Failure**

1/1y

34. The Factors that interact in the pathogenesis of cholesterol gallstones include all the following except:

- a. Cholesterol supersaturation
- b. Gallbladder stasis
- c. Accelerated nucleation
- d. The triangular relation between bile salts, cholesterol and lecithins
- e. **High bilirubin concentration**

35. The following are functions of the gallbladder except:

- a. absorption of some bile components
- b. contraction on ingestion of fatty meals
- c. mucus secretion
- d. storage of bile
- e. **formation of bile** [in liver]

36. Which one of the following statements is incorrect in regard to stones in the gallbladder?

- a. Pigment stones are due to increased excretion of conjugated bilirubin ✓
- b. Cholesterol stones are the commonest type 85% ✓
- c. **10% of gallstones can be radio-opaque** 20% (circled)
- d. A mucocele of the gallbladder is caused by a stone impacted in Hartman's pouch

37. In obstructive jaundice :

- a. Serum ~~un~~conjugated bilirubin is increased. ✗
- b. Urinary urobilinogen is increased. ✗ ↓
- c. Serum conjugated bilirubin is reduced. ✗ ↑
- d. Faecal stercobilinogen is increased. ✗ ↓
- e. **None of the above**

38. The most commonly used imaging method for diagnosis of acute cholecystitis is:

- a. CT of the abdomen.
- b. **Ultrasonography of the gallbladder.** [initial]
- c. Oral cholecystogram.
- d. Radionuclide (HIDA) scan of the gallbladder.

39. A 9 month old boy presents with an acute scrotal swelling. The following diagnoses are likely: *the mcc of acute scrotal swelling is* Hydroceles...
Hernia...

- a. Epididymitis
- b. Orchitis
- c. Torsion of the testicular appendage
- d. Irreducible inguinal hernia
- e. Acute idiopathic scrotal oedema

40. Which of the following tests has the highest sensitivity in localizing parathyroid adenomas?

- a. Ultrasound
- ⇒ b. Fine cut CT scan *has high sensitivity and specificity...*
- c. PET scan
- d. Sestamibi scan *with 4D-CT...*

41. The phase of coagulation that begins with exposed endothelial collagen is:

- a. extrinsic pathway *[activated by tissue factor release by endothelial cells]...*
- b. intrinsic pathway ✓
- c. common pathway
- d. fibrin stabilization

42. Considering only the ABO system of red blood cell typing, which of the following is true?

- a. People of blood type A have the B antigen only
- b. People of blood type B have the A antigen only
- c. People of blood type O have the O antigen
- d. People of blood type O have no antigens

43. Daily secretion of Bile by liver is:

- a. 100-300 ml
- b. 300-500 ml
- c. 500-1000ml
- d. 500-1200 ml
- e. 1000-1500 ml.

44. Acute abdomen:

- a. ~~Is always~~ surgical in etiology
- b. could be a complication of pregnancy
- c. ~~never~~ occurs in jaundiced patients
- d. can be caused by diabetes mellitus *(rare)*
- e. ~~Always~~ needs surgical intervention.

45. Which of these statements regarding Meckle's diverticulum is correct?

- a. It is found in about 4% of the population.
- b. It is a true diverticulum and always found on the antimesenteric border of the ileum.
- c. Is usually about 2 cm in length.
- d. Is usually located about 20 cm from the ileocaecal junction.
- e. Is usually attached to the umbilicus.

46. The evaluation of a patient scheduled for elective surgery should always include the following as indicators of hemostasis and coagulation:

- a. History and physical examination.
- b. Complete blood count (CBC), including platelet count.
- c. Prothrombin time (PT) and activated partial thromboplastin time (APTT).
- d. Studies of platelet aggregation with adenosine diphosphate (ADP) and epinephrine.

47. Hemostasis and the cessation of bleeding require which of the following processes?

- a. Adherence of platelets to exposed subendothelial glycoproteins and collagen with subsequent aggregation of platelets and formation of a hemostatic plug.
- b. Interaction of tissue factor with factor VII circulating in the plasma.
- c. The production of thrombin via the coagulation cascade with conversion of fibrinogen to fibrin.
- d. Cross-linking of fibrin by factor XIII.
- e. All of the above

48. The commonest clinical manifestation of primary hyperparathyroidism is:

- a. Renal stone disease
- b. Bone disease
- c. Polyurea
- d. Peptic ulceration
- e. Constipation

49. Cytokines which play an important role in the metabolic response to injury include:

- a. Interferon-g
- b. Tumor necrosis factor— α (TNF)
- c. Interleukin-1 (IL-1)
- d. Interleukin-6 (IL-6)
- e. all of the above

50. Which of the following is true of oxygenation in septic shock?

- a. Oxygen delivery is elevated while oxygen extraction is decreased
- b. Oxygen delivery is reduced while oxygen extraction is increased
- c. Arterial-venous oxygen difference is increased
- d. Both oxygen delivery and extraction are increased
- e. Mixed venous oxygen is decreased

51. Maintenance fluid in surgical patients

- a. Insensible loss is about 800 cm and is lost from skin and lung
- b. Patient temperature does not affect insensible loss
- c. Urine output in adult should not be less than 1.5 ml/Kg /hour
- d. Oxidation of fat produce extra 300 ml of water per day
- e. Na⁺ requirement as maintenance is around 300 mmol per day

52. Anion gap is

- a. The difference between measured anions and measured cations
- b. Normal in pancreatic fistula
- c. Is normal in lactic acidosis
- d. Is not affected by Hypoalbuminaemia
- e. Normally is 20 mmol

53. Regarding total body water (TBW)

- a. Is 60% of body weight in an adult
- b. Intracellular fluid is about 28 liter
- c. Extracellular fluid is mainly interstitial fluid, and roughly about 14 liters
- d. Neonate TBW is about 80% of body weight
- e. All of the above

54. In acid base balance

- a. Kidney control HCO₃ through reabsorption of secreted bicarbonate in proximal renal tubules only
- b. Respiratory compensation takes hours to work
- c. Acids are molecules that has the ability to release H⁺ ions
- d. PH changes have no effect on K⁺ levels
- e. None of the above

55. Causes of metabolic acidosis include all except

- a. Small bowel fistula
- b. Shock
- c. severe anemia
- d. repeated vomiting
- e. Diarrhea

56. Prognostic nutritional indices include all except

- a. Serum albumin less than 30 gm/l
- b. Increase total lymphocytic count
- c. Serum transferrin less than 220 mg/dl
- d. Serum prealbumin less 160 mg/dl
- e. Failure of immune system to react to skin antigen.

57. Regarding colorectal cancer

- a. Peak incidence is in 5th decade
- b. Non specific abdominal pain is an early non specific sign
- c. Synchronous tumor compromise 20%
- d. Grading system is affected by lymph node status
- e. Caecal lesions cause large bowel obstruction

58. Regarding polyps of the colon

- a. Adenomatous polyps are usually solitary
- b. Villous polyps are usually pedunculated
- c. Metaplastic polyps are not precancerous
- d. Villous polyps occur more proximal in colon
- e. Cancer risk is not related to size of polyp

59. Screening for colorectal cancer include all except

- a. Faecal occult blood
- b. Tumor marker CEA, CA 15.3
- c. Double contrast barium enema
- d. Colonoscopy
- e. Virtual colonoscopy

60. Regarding Crohn's disease

- a. Cryptitis is diagnostic.
- b. Loss of goblet cell mucin is common histological feature
- c. Sub mucosal fibrosis.
- d. Deep caseating granulomas
- e. Commonest area affected is small bowel alone

61. Ulcerative colitis

- a. Most common area affected is sigmoid colon
- b. Most patients presents with bloody diarrhea
- c. Cancer risk is not related to duration of disease but to its severity
- d. Extra colonic symptoms are very rare
- e. Transmural inflammation is diagnostic

62. Regarding anal fissure all are true except

- a. Most fissures occur in midline posteriorly
- b. Anterior fissure is common after childbirth
- c. most common symptom is pain
- d. Lateral fissure occur in inflammatory bowel disease
- e. Skin tags are common in acute fissures

63. Anal hemorrhoid

- a. First degree hemorrhoid cause pain only
- b. Fourth degree hemorrhoids is reduced by patient
- c. Internal piles arise below dentate line
- d. Straining and constipation is an important causes
- e. Causes fresh bleeding per rectum, mixed with stool

64. Anal fistula all are true except

- a. Most fistula are cryptoglandular in origin
- b. Commonest type is intersphincteric
- c. Extrasphincteric fistula internal opening is in rectum
- d. Goodsall's rule states that anterior fistula open in mid line anteriorly
- e. Rare causes include inflammatory bowel disease and radiation

65. Regarding Pilonidal sinus

- a. More common in females
- b. Usually occur at age of forty
- c. Abscess is the most common complication
- d. External opening are usually 2 cm away from anus
- e. Opening are usually lateral to midline

66. Third space loss is due to all except

- a. Burns crush syndrome.
- b. Severe soft tissue infections
- c. Repeated vomiting
- d. Intestinal obstruction
- e. Site of major operative dissection

67. Dukes staging for colon cancer

- a. Dukes B with lymph node metastasis
- b. Dukes C has 40% five year survival
- c. Dukes A is the commonest presentation
- d. Dukes D has good prognosis
- e. Dukes B localized to sub mucosa

68. Regarding gastric adenocarcinomas

- a. Represent 60% of gastric neoplasm
- b. Diffuse type is located usually in pyloric region
- c. Intestinal type has worse prognosis
- d. HLO has no role in etiology of gastric adenocarcinomas
- e. Diffuse type is usually in young people when compared by intestinal type

69. Gastric lymphoma

- a. Most people are asymptomatic
- b. Represent 20% of gastric neoplasms
- c. Usually is low grade T cell lymphoma
- d. Epigastric and diffuse abdominal pain is commonest symptom
- e. No relation to HLO infection

70. Extra colonic manifestation of inflammatory bowel disease include all except

- a. Polyarthopathy
- b. Mixed connective tissue disease
- c. Erythema nodosum
- d. Primary Sclerosing cholangitis
- e. Episcleritis

71. Diverticular disease of colon

- a. Diverticulosis causes left sided abdominal pain
- b. Hinchey classification scheme type III is pelvic abscess
- c. Diverticulitis is caused by micro-macro perforation of the diverticulum
- d. Sigmoid diverticulæ are true traction type
- e. Most common complication is malignant transformation

72. Regarding gastric neoplasm

- a. Early gastric cancer is cancer in mucosa or submucosa regardless of lymph node status
- b. Gastrointestinal stromal tumor GIST metastasize to lymph nodes early
- c. Carcinoid of stomach is 2nd commonest cancer in stomach after adenocarcinomas
- d. Most common symptom of gastric cancer is weight loss
- e. None of the above

73. Nitrogen balance

- a. Daily requirement of nitrogen is 0.4gm nitrogen per kilogram body weight
- b. 60% of nitrogen is lost in urine
- c. 10 gm nitrogen is present in 6.25 gm proteins
- d. Roughly for each gram nitrogen given to patient 150 k calorie is required
- e. 4 gm nitrogen is lost daily in stools

74. Causes of respiratory acidosis include all except

- a. Multiple rib fracture
- b. Upper abdominal, and thoracoabdominal incisions
- c. Mucus plug obstructing respiratory airways
- d. Depression of respiratory center
- e. Shallow rapid breathing

75. These ABGs (pH-7.51, pCO₂-28, HCO₃-26) show

- a. Partially compensated respiratory acidosis
- b. Uncompensated respiratory alkalosis
- c. Uncompensated respiratory acidosis
- d. Partially compensated metabolic acidosis
- e. Normal acid-base balance