

ATHEROSCLEROSIS

1. Atherosclerosis Affects

- a) Arteries
- b) Veins
- c) Cardiac Chambers
- d) All The Above
- e) None Of the Above

2. Atherosclerosis Is A

- a) Inflammatory Disease
- b) Degenerative Disease
- c) Autoimmune Disease
- d) None Of the Above

3. The Most Important Risk Factor for Atherosclerosis in Patients Under 45 Years Is:

- a) Male Sex
- b) Smoking
- c) Lack Of Physical Exercise
- d) Hyperlipidemia

4. Atherosclerosis Is Characterized by All Except:

- a) Affects Arteries And Veins
- b) Thrombosis Is The Most Important Complication
- c) A Very Common Disease
- d) Hypertension Is A Major Risk Factor
- e) Lipid Accumulates In The Vessel Wall

5. The Following Does Not Predispose To Atherosclerosis:

- a) Hypertension
- b) Diabetes Mellitus
- c) Rheumatic Heart Disease
- d) High Fat Diet
- e) Smoking

| | | | | |
|------|------|------|------|------|
| 1- A | 2- B | 3- D | 4- A | 5- C |
|------|------|------|------|------|

6. Pathological Features Of Atherosclerosis Include All Except:

- a) Fatty Streaks
- b) Atheromatous Plaques
- c) Hyaline Thickening Of The Arterial Wall
- d) Thrombus Formation
- e) Calcification

7. Intimal Thickening In Atherosclerosis Is Due To:

- a) Accumulation Of Lipids
- b) Smooth Muscle Proliferation
- c) Fibrous Tissue Formation
- d) All The Above

8. The Presence of Many Foamy Macrophages In The Arterial Wall Is Characteristic Of:

- a) Syphilitic Arteritis
- b) Hypertension
- c) Atherosclerosis
- d) All the Above
- e) None Of the Above

9. The Most Important Complication of Atherosclerosis Is:

- a) Thrombus Formation
- b) Dystrophic Calcification
- c) Hemorrhage
- d) Ulceration
- e) Aneurysmal Dilation

10. ATHROMA is characterized by all the following except

- a) yellowish white intimal lesion.
- b) It reaches up to 1.5 cm in diameter.
- c) It protrudes into the vascular lumen.
- d) There is no complications can occur on it

| | | | | |
|------|------|------|------|-------|
| 6- C | 7- D | 8- C | 9- A | 10- D |
|------|------|------|------|-------|

HYPERTENSION

1) Hypertension affects:

- a) Large arteries
- b) Medium-sized arteries
- c) Small arteries and arterioles
- d) All the above
- e) None of the above

2) The commonest cause of secondary hypertension is:

- a. Renal diseases
- b. Liver diseases
- c. Cerebral diseases
- d. Blood diseases
- e. Cardiac diseases

3) In benign hypertension, the arterial wall shows the following pathological changes EXCEPT:

- a. Fibrosis
- b. Elastosis
- c. Hyalinosis
- d. Necrosis
- e. Thickening

4) In malignant hypertension, the arterioles do NOT show:

- a. Fibrinoid necrosis
- b. Onion skin appearance
- c. Elastosis
- d. Thickening of the wall
- e. Narrowing of the lumen

5) Concentric hyperplasia Arteriolosclerosis occurs in:

- a. Benign essential hypertension
- b. Malignant essential hypertension
- c. Atherosclerosis
- d. All the above
- e. None of the above

6) The most common cause of death in malignant hypertension is:

- a. Renal failure
- b. Cerebral hemorrhage
- c. Congestive heart failure
- d. Coronary insufficiency
- e. Respiratory failure

1- D

2- A

3- D

4- C

5- B

6- A

7) Onion skin appearance of arteries is seen in

- a) Benign essential hypertension
- b) Malignant essential hypertension
- c) Atherosclerosis
- d) All the above
- e) None of the above

8) Atherosclerosis is predominantly disease of

- a) Intima
- b) Media
- c) Adventitia
- d) Entire vessel wall

9) The following lipids has high association with atherosclerosis

- a) Triglyceride
- b) Low density lipoprotein
- c) High density lipoprotein
- d) Very low-density lipoprotein

10) Systemic hypertension leads to

- a) Left ventricular hypertrophy
- b) Increased incidence of infective endocarditis
- c) Both
- d) Neither

11) Hypertension is characterized by which one of the following:

- a) aortic stenosis
- b) pan carditis
- c) left ventricular hypertrophy
- d) valvular vegetation
- e) coarctation of aorta

12) A 45-year-old male has a blood pressure of 200/120. A needle biopsy of the kidney should reveal most significantly in the above case:

- a) hyperplastic (onion skin) arteriolosclerosis
- b) hyaline arteriolosclerosis
- c) atherosclerosis
- d) Diabetic nephrosclerosis

13) Causes of secondary hypertension include:

- a) Mitral stenosis
- b) Vasospasm
- c) Renal artery stenosis
- d) Myocardial infarction

| | | | | | | |
|------|------|------|------|-------|------|------|
| 7- B | 8- a | 9- b | 10-a | 11- c | 12-a | 13-c |
|------|------|------|------|-------|------|------|

LYMPHOMA

1. Which type of Hodgkin's disease has the worst prognosis?

- a. lymphocytic predominance
- b. Nodular sclerosing
- c. Mixed cellularity
- d. lymphocytic depletion

2. Lymph node findings that favor nodular (follicular) lymphoma over reactive follicular hyperplasia include all EXCEPT:

- a. Prominent follicles in the cortical area
- b. Similarity of cell types inside and outside the follicles
- c. Monotonous cells in the center of follicles
- d. Cellular infiltration of the capsule

3. Which type of Hodgkin's disease is most likely to be diagnosed at an early stage?

- a. Lymphocyte predominance.
- b. Mixed cellularity
- c. Nodular sclerosis
- d. Lymphocyte depletion

4. The most important difference among those listed between a benign reactive lymph node and lymphoma is:

- a. Interstitial fibrosis.
- b. Follicular hyperplasia
- c. Effacement of normal architecture.
- d. Presence of plasma cells

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| D | A | A | C |

5. Lymphomas exhibiting a follicular (nodular) growth pattern are derived from (جمله مش موجوده مباشره)

- a. Germinal center histiocytes
- b. Germinal center lymphocytes
- c. Paracortical histiocytes.
- d. Paracortical lymphocytes

6. Reed-Sternberg cells are characteristic of which disease?

- a. Chronic lymphatic leukemia
- b. Cat scratch disease
- c. Hodgkin's disease
- d. Histiocytic medullary reticulosis
- e. Large cell lymphoma

7. Which of the following histopathologic types of Hodgkin's disease is known to have the best prognosis?

- a. Lymphocyte depletion
- b. Lymphocyte predominance
- c. Mixed cellularity
- d. Nodular sclerosis

8. A worse prognosis can be expected in lymphoma if which one of the following is present?

- a. diffuse growth pattern
- b. A nodular or follicular pattern of growth
- c. Better differentiation
- d. One anatomic region involved

| | | | |
|---|---|---|---|
| 5 | 6 | 7 | 8 |
| B | C | B | A |

9. Reactive follicular hyperplasia is characterized by:

- a. B lymphocytes immunoreactivity.
- b. High mitotic rate.
- c. Variable size follicles, mainly in cortex.
- d. All of above

10. Lymphoma is:

- a. Benign tumor of lymph nodes.
- b. Malignant tumor of lymphoid tissue.
- c. A type of granuloma.
- d. Hyperplasia of lymphoid tissue.

11. What is the most common type of Hodgkin Lymphoma?

- a. Lymphocyte rich type.
- b. Nodular sclerosis type.
- c. Mixed cellularity type.
- d. Lymphocyte depleted type.

**12. What is the Least common type of Hodgkin Lymphoma?**

- a. Lymphocyte rich type.
- b. Nodular sclerosis type.
- c. Mixed cellularity type.
- d. Lymphocyte depleted type.

| | | | |
|---|----|----|----|
| 9 | 10 | 11 | 12 |
| D | B | B | D |

13. In Hodgkin's lymphoma:

- a. The affected lymph nodes are small and soft.
- b. The affected lymph nodes are caseating.
- c. The affected lymph nodes discharge pus.
- d. The affected lymph nodes are enlarged and matted together.

14. All are types of Reed Sternberg cells EXCEPT:

- a. Langan's giant cells.
- b. Lacunar cells.
- c. Mononuclear variant
- d. Lympho-histiocytic variant.

15. The characteristic cell of nodular sclerosis type of Hodgkin's disease is:

- a. Classic Reed Sternberg cell.
- b. Lacunar cell.
- c. Pop corn cell.
- d. Mononuclear variant.

**16. All of the following are true about paracortical lymphoid hyperplasia EXCEPT:**

- a. Follicles are compressed
- b. Caused by stimuli that trigger B cellular response.
- c. Reactive changes within paracortical region.
- d. Mixed infiltrate of macrophages and eosinophils.

| | | | |
|----|----|----|----|
| 13 | 14 | 15 | 16 |
| D | A | B | B |

17. All are features of Follicular lymphoma EXCEPT:

- a. Complete effacement of L.N architecture by follicles,
- b. Distributed throughout the cortex and medulla
- c. Moderate variation in size and shape
- d. Marked variation in the shape and size of lymphoid follicles

18. Type of non-Hodgkin lymphoma which is presented as mediastinal mass?

- a. Burkitt lymphoma
- b. Diffuse large B-Cell Lymphoma
- c. SLL
- d. Lymphoblastic lymphoma

19. Which of the following is true about lymphoma:

- a. Some types in as welated with leukemia
- b. Hodgkin lymphoma can affect children, young adults, or elderly
- c. Lymphoma may occur in stomach and testi
- d. All of the above

20. In Hodgkin disease, the best favorable prognosis is seen with:

- a. Lymphocyte rich type.
- b. Nodular sclerosis type.
- c. Mixed cellularity type.
- d. Lymphocyte depleted type.

| | | | |
|----|----|----|----|
| 17 | 18 | 19 | 20 |
| D | D | D | A |

21. The characteristic features of Reed-Sternberg cells are:

- a. Owl eye appearance of nucleoli.
- b. Bilobed nuclei
- c. Mirror image appearance of nuclei
- d. All of the above

22. All the following are features of Burkitt's lymphoma except:

- a. common mainly in African children
- b. Affect young age.
- c. highly aggressive tumor
- d. it is a distinctive type of T-cell lymphoma
- e. It's associated with EB virus

23) Starry-Sky appearance is characterized to which type:

- a. Burkitt lymphoma
- b. Diffuse large B-Cell Lymphoma
- c. SLL
- d. Lymphoblastic lymphoma

| | | |
|----|----|----|
| 21 | 22 | 23 |
| D | D | A |

24- The most important difference among those listed between a benign reactive lymph node and lymphoma is:

- a) Interstitial fibrosis.
- b) Follicular hyperplasia
- c) Effacement of normal architecture
- d) Presence of plasma cells

25- Non-Hodgkin lymphoma is characterized by all of the following except:

- a) Originates from Monoclonal B-Cell or T- Cell
- b) May have leukemic phase
- c) Follicular has better prognosis than diffuse lymphoma.
- d) Lymphomas can't transform from one type to another type.

26- Burkitt Lymphoma is characterized by following: *

- a) Related to EBV
- b) High mitosis
- c) Produce extranodal tumors
- d) A highly aggressive tumor.
- e) All of the above

| | | |
|----|----|----|
| 24 | 25 | 26 |
| C | D | E |

27- Reactive follicular hyperplasia is characterized by all of the following

EXCEPT:

- a) Preserved lymph node architecture
- b) Pale germinal centers
- c) Variable size follicles, mainly in cortex
- d) Loss of lymph node architecture

28- Which stage of lymphoma that involve two or more lymph node sites on one side of the diaphragm or limited contiguous extranodal site:

- a) Stage I
- b) Stage II
- c) Stage III
- d) Stage IV

29- Which stage of lymphoma that involve two or more lymph node sites on Both sides of diaphragm with splenic or limited contiguous extranodal site involvement, or both?

- a) Stage I
- b) Stage II
- c) Stage III
- d) Stage IV

| | | |
|----|----|----|
| 27 | 28 | 29 |
| D | B | C |

امتحانات مختلفه من سنوات سابقه

Random night blood specimens were collected from 500 subjects in an area endemic for Lymphatic parasites in India. Some cases were symptomatic, with or without recurrent episodes of fever and various degrees of lymphedema. Elephantiasis is restricted to area below the knee or elbow. The parasite Observed on Giemsa-stained thick blood Films was 220 micrometers in length sheathed with kinky curves and the tail has 2 terminal nuclei.

1) The presentation of these cases is consistent with which type of lymphadenitis:

- a) Acute specific lymphadenitis
- b) Acute non-specific lymphadenitis
- c) Chronic specific lymphadenitis
- d) Chronic non-specific lymphadenitis

2) Sinus histiocytosis is:

- a) Acute non-specific lymphadenitis
- b) Distention lymphatic sinusoids by macrophages
- c) Reactive changes within the T-cell paracortical regions
- d) Increase number & size of lymphoid follicles with prominent pale germinal center

3) In acute non-specific lymphadenitis:

- a) Lymph node can't resolve and healing by fibrosis
- b) It is usually presented by tenderness, pain.
- c) LNs become small and hard.
- d) Microscopically it shows small lymphoid follicles.

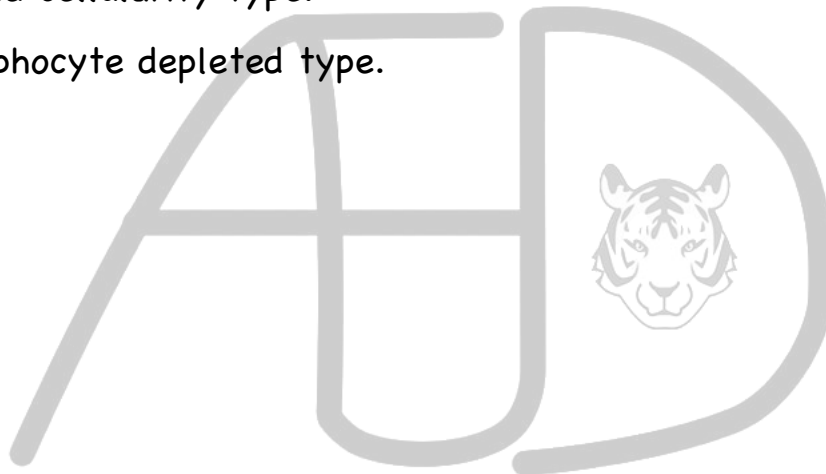
| | | |
|------|------|------|
| 1- C | 2- B | 3- B |
|------|------|------|

4) One of the general features of non-Hodgkin lymphoma is

- a) Transformation of one type of lymphoma to another never occurs
- b) R-S cells are characteristic
- c) Follicular Lymphoma has better prognosis than diffuse Lymphoma
- d) Rare extra nodal presentation

5) Which Hodgkin lymphoma show bands of fibrosis and lacunar cells on microscopic examination ?

- a) Lymphocyte rich type.
- b) Nodular sclerosis type.
- c) Mixed cellularity type.
- d) Lymphocyte depleted type.



| | |
|---|---|
| 1 | C |
| 2 | B |
| 3 | B |
| 3 | C |
| 4 | B |

CHRONIC BRONCHITIS – BRONCHIAL ASTHMA – BRONCHIECTASIS

1) Charcot-Leyden crystals and Curschmann's spirals are seen in:

- A. Bronchial asthma
- B. Chronic bronchitis
- C. Bronchiectasis
- D. Emphysema

2) Serum IgE levels are elevated in:

- A. Intrinsic bronchial asthma.
- B. extrinsic bronchial asthma.
- C. Predominant chronic bronchitis
- D. Predominant emphysema

3) Occupational asthma is associated with all EXCEPT:

- A. Type 1 IgE-mediated reactions
- B. Very minute quantities of chemicals are required to induce the asthma attack
- C. occurs after repeated exposure
- D. Precipitated by cold

4) All the following features are commonly associated with chronic bronchitis EXCEPT:

- A. Hyperplasia of bronchial mucus glands
- B. Productive cough
- C. severe dyspnea early in the disease
- D. Increased Resistance to air inflow,
- E. Frequent infections.

5) Atopic asthma is associated with all of the following EXCEPT:

- A. Specific allergens,
- B. Prostaglandin D2/mediated bronchoconstriction
- C. Type IgE mediated reactions
- D. Fibrotic pancreas
- E. leukotriene c4, d4 and E4 mediated bronchoconstriction

| | | | | |
|------|------|------|------|------|
| 1) A | 2) B | 3) D | 4) D | 5) D |
|------|------|------|------|------|

6) The characteristic inflammatory cells observed in bronchial asthma are:

- A. Neutrophils
- B. eosinophils
- C. Histiocytes
- D. Lymphocytes.
- E. Basophils

7) Mucous gland hyperplasia of the bronchi is most characteristic of which of the following:

- A. Adenocarcinoma of lung
- B. chronic bronchitis
- C. Pneumocystis carinii pneumonia
- D. Lobar pneumonia
- E. Pulmonary tuberculosis

8) The single most characteristic feature of bronchiectasis

- A. Excess mucus secretion
- B. Immotile cilia
- C. Dilatation of bronchi
- D. Alpha-1-antitrypsin deficiency
- E. Hypoplasia of bronchial gland

9) Morphologic features of chronic bronchitis include all of the following EXCEPT:

- A. Loss of cilia.
- B. Enlarged submucosal glands
- C. Peri bronchial fibrosis
- D. Disappearance of goblet cells
- E. Inflammatory cells in the bronchial mucosa

10) Blood in the sputum is associated with all of the following EXCEPT:

- A. Bronchiectasis.
- B. Heart failure.
- C. Kartagener's syndrome.
- D. Pulmonary thromboembolism.
- E. Bronchial asthma

بالاستبعاد

| | | | | |
|------|------|------|------|-------|
| 6) B | 7) B | 8) C | 9) D | 10) E |
|------|------|------|------|-------|

11) The earliest feature of chronic bronchitis is:

- A. Hypoxia.
- B. Enlargement of alveolar ducts and respiratory bronchioles
- C. Loss of surfactant
- D. Hyperplasia of the submucosal glands.
- E. Charcot-leiden crystals in the pulmonary interstitium.

12) Chronic obstructive pulmonary disease includes all the following except:

- A. emphysema
- B. chronic bronchitis
- C. usual interstitial pneumonitis
- D. bronchial asthma
- E. bronchiectasis

13) complete bronchial obstruction lead to:

- A. Emphysema
- B. Alveolar collapse
- C. Chronic bronchitis.
- D. Pneumonia.
- E. Bronchial asthma

14) Partial bronchial obstruction leads to:

- A. Emphysema.
- B. Alveolar collapse.
- C. Chronic bronchitis.
- D. Pneumonia.
- E. Bronchial asthma

15) The histologic features of bronchiectasis include all except:

- A. Dilation of the bronchi and bronchiole
- B. Destruction of the bronchial wall
- C. The bronchial lumen is filled with pus
- D. the bronchial wall is infiltrated by many eosinophils
- E. the intervening lung tissue shows fibrosis

| | | | | |
|------|-------|-------|-------|-------|
| 11)D | 12) C | 13) B | 14) A | 15) D |
|------|-------|-------|-------|-------|

- 16) all the following are feature of bronchiectasis except :
- Permanent dilation of bronchi and bronchioles
 - Apical in location
 - Chronic necrotizing suppurative inflammation
 - Patient complains of cough with purulent sputum
 - May be complicated by septicemia
- 17) Increased Reid's index is in which of the following?
- Bronchiectasis
 - Bronchial asthma
 - Chronic bronchitis
 - Emphysema
- 18) 54-year-old male smoker is diagnosed with chronic bronchitis. A biopsy of the bronchus is performed. Which of the following is the most likely finding in histology?
- abundant mucus with plugging of the bronchioles
 - Alveolar destruction and enlargement
 - Interstitial fibrosis
 - Noncaseating granuloma
- 19) Most common etiologic factor implicated in chronic bronchitis:
- Atmospheric pollution
 - Cotton mills
 - Mycoplasma infection
 - Cigarette smoking
- 20) Most common type of asthma that begins in childhood and triggered by environmental antigens such as dust, pollens and food is:
- Non-atopic asthma.
 - Drug Induced asthma
 - Atopic asthma
 - Occupational Asthma

| | | | | | | | | | |
|-----|---|-----|---|-----|---|-----|---|-----|---|
| 16) | B | 17) | C | 18) | A | 19) | D | 20) | C |
|-----|---|-----|---|-----|---|-----|---|-----|---|

- 21) Which type of asthma occurs in late adult life:
- A. Atopic asthma
 - B. intrinsic asthma
 - C. Mixed asthma
 - D. Allergic asthma
- 22) Reid index used as a criteria of quantitation in chronic bronchitis is the ratio of thickness of:
- A. bronchial mucosa to that of bronchial wall
 - B. submucosal glands to that of bronchial wall
 - C. bronchial cartilage to that of bronchial wall
 - D. Inflammatory infiltrate to that of bronchial wall
- 23) A 65-year-old male with a history of smoking with productive cough for many years came in at the emergency room with difficulty of breathing. Chest X-ray shows prominent blood vessels and large heart. Patient went into cardiorespiratory arrest. Resuscitation done but to no avail. Histologic section taken from the lung/at autopsy shows enlargement of the mucus secreting glands of the trachea and bronchi. What is the most likely diagnosis?
- A. Emphysema.
 - B. Bronchial asthma
 - C. Chronic bronchitis
 - D. Bronchiectasis.
- 24) Most common type of asthma of childhood that triggered by environmental antigens such as dust, pollens and food is;
- A. Non-atopic.
 - B. Drug Induced.
 - C. Atopic.
 - D. Occupational.
- 25) Occupational asthma is associated with all EXCEPT:
- A. Type I IgE-mediated reactions.
 - B. Very minute quantities of chemicals are required to induce the asthma attack.
 - C. Occurs after repeated exposure.
 - D. Precipitated by cold.

| | | | | | | | | | |
|-----|---|-----|---|-----|---|-----|---|-----|---|
| 21) | B | 22) | B | 23) | C | 24) | C | 25) | D |
|-----|---|-----|---|-----|---|-----|---|-----|---|

- 26) Chronic bronchitis is likely to be associated with all EXCEPT:
- A. Cor pulmonale.
 - B. Dysplasia of respiratory epithelium.
 - C. Ankle edema.
 - D. Rheumatoid arthritis.
- 27) The characteristic inflammatory cell observed in H and E slides of bronchial asthma is:
- A. Neutrophils.
 - B. Eosinophils,
 - C. Histiocytes.
 - D. Lymphocytes.
 - E. Basophils (mast cells).
- 28) A 5-year-old boy aspirated a peanut into his right lower lobe bronchus 1 month ago. He presents with low grade fever and cough productive of a yellow-flecked sputum, Chest x-ray shows increased density in the right lower lobe. The peanut is removed by a bronchoscopist. This patient is at increased risk of developing clinically significant:
- A. Bronchiectasis.
 - B. Pulmonary tuberculosis.
 - C. Pulmonary infarction.
 - D. Bronchogenic carcinoma.
 - E. Bronchial asthma.
- 29) A 28-year-old woman with cystic fibrosis presents with increasing shortness of breath and production of abundant foul-smelling sputum. The sputum in this patient is most likely associated with which of the following pulmonary conditions?
- A. Atelectasis.
 - B. bronchiectasis.
 - C. Empyema.
 - D. Pneumothorax.
 - E. Pyothorax.
- 30) Suppurative lung diseases include all EXCEPT:
- A. Bronchiectasis
 - B. Bronchial asthma
 - C. Lung abscess.
 - D. Gangrene.
 - E. Empyema.

| | | | | | | | | | |
|-----|---|-----|---|-----|---|-----|---|-----|---|
| 26) | D | 27) | B | 28) | A | 29) | B | 30) | B |
|-----|---|-----|---|-----|---|-----|---|-----|---|

RESTRICTIVE + LUNG TUMORS

The most aggressive type of bronchogenic carcinoma is:

- a) Squamous cell carcinoma.
- b) Adenocarcinoma.
- c) Small cell carcinoma.
- d) Large cell carcinoma.
- e) Giant cell carcinoma.

1) Bronchial carcinoid arises from :-

- a) Columnar ciliated epithelium.
- b) Goblet cell.
- c) Alveolar lining cells.
- d) Kulchitsky cells.

2) The most important mutation in small cell carcinoma is in the following gene:

- a) RB gene.
- b) MYC gene.
- c) CDK gene.
- d) RAS gene.

3) Which of the followings is most common tumor in the lung?

- a) Adenocarcinoma.
- b) Squamous cell carcinoma.
- c) Metastatic neoplasm.
- d) Hamartomae.
- e) Malignant melanoma.

4) The most important risk factor of bronchogenic carcinoma is:

- a) Smoking
- b) Asbestos
- c) Air pollution.
- d) Radiation.
- e) Pulmonary scars.

5) The following is true for the usual pulmonary adenocarcinoma:

- a) Equal frequency in males and females
- b) Peripherally located.
- c) NOT related to scarring.
- d) Slower rate of growth.
- e) related to smoking.

6) Malignant pleural mesothelioma is characterized by all EXCEPT:

- a) It is related to heavy exposure to asbestosis.
- b) It appears as diffuse thickening of the pleura.
- c) It is Not associated with pleural effusion.
- d) It may be of the sarcomatoid or epithelial type.
- e) It arises from visceral or parietal pleural.

7) Which of the following can develop into lung cancer?

- a) Asbestosis
- b) Silicosis
- c) Byssinosis
- d) Anthracosis.

8) A 60-year-old man has been smoking for many years, he experienced chronic cough and weight loss for the past 6 months, no fever no nausea and vomiting. He had one bout of hemoptysis and went to the ER for consultation. X-ray shows a 6 cm mass on the medial upper lobe. Bronchoscopy shows a mass on the segmental bronchus. Which of the following cytologic findings is likely to be found in this patient?

- A) Presence of acid-fast organism on sputum exam.
- B) Presence of malignant squamous cells in sputum.
- C) Presence of numerous necrotic debris and inflammatory cells in sputum.
- D) Presence of reactive mesothelial cells in pleural fluid exam.

10) The following histologic types of bronchogenic carcinoma have strong association with cigarette smoking EXCEPT :

- a) Squamous cell carcinoma.
- b) Small cell carcinoma
- c) Large cell carcinoma.
- d) adenocarcinoma.

ابعد واحده عن التدخين

11) Bronchial Carcinoid of the lung arises from: -

- a) Columnar ciliated epithelium.
- b) Goblet cell
- c) Alveolar lining cells,
- d) kulchitsky cells.

12) Which of the following histologic types of carcinomas is most likely to be found at the periphery of the lung preceded by healed lung lesions?

- a) Adenocarcinoma
- b) Large cell carcinoma
- c) Small cell carcinoma
- d) Squamous cell carcinoma.

13) 55-year-old male has hemoptysis, a right perihilar mass, and convulsions. He dies of bronchopneumonia and a neoplasm is found in the lung and the brain. Histologically the tumor is most likely:

- a) Sarcoma
- b) Squamous cell carcinoma
- c) Glioblastoma multiforme
- d) Meningioma
- e) Oligodendroglioma.

14) Which of the followings is most common neoplasm in the lung?

- a. Adenocarcinoma.
- b. Squamous cell carcinoma
- c. Metastatic neoplasm
- d. Hamartoma.
- e. Malignant melanoma.

15) A 55-year-old man has no major medical problems in the past year, 4 months prior to consultation the patient experience malaise and weight loss of 10 kg. The patient is a non-smoker, no fever, no difficulty of breathing. Chest X-ray shows multiple solid nodules scattered through-out the lung fields. What is the most likely diagnosis?

- a. Bronchogenic carcinoma
- b. Metastatic carcinoma
- c. Malignant mesothelioma.
- d. Bronchoalveolar carcinoma.

16) Bronchogenic carcinoma has increased incidence in the following pneumoconiosis:

- a) Coal workers pneumoconiosis.
- b) Silicosis.
- c) Asbestosis.
- d) Berylliosis.

17) Which statement best describes sarcoidosis?

- A. Characterized by caseating granulomas
- B. Results from fungal infection
- C. Shows non-caseating granulomas with Schaumann bodies
- D. Typically affects elderly males only

18) Which environmental exposure is most commonly associated with hypersensitivity pneumonitis?

- A. Coal
- B. Bird droppings
- C. Asbestos
- D. Arsenic

19) Which restrictive lung disease results from a type III and IV hypersensitivity reaction?

- A. Sarcoidosis
- B. Coal workers' pneumoconiosis
- C. Hypersensitivity pneumonitis
- D. Bronchiectasis

20) Which drug is not associated with pulmonary fibrosis?

- A. Amiodarone
- B. Methotrexate
- C. Bleomycin
- D. Cisplatin

21) Which lung disease is characterized by non-caseating granulomas and is immune-mediated?

- A. Tuberculosis
- B. Sarcoidosis
- C. Silicosis
- D. Histoplasmosis

22) What is the diagnostic histological hallmark of asbestosis?

- A. Reed-Sternberg cells
- B. Asbestos bodies
- C. Schaumann bodies
- D. Langhans giant cells

23) Which of the following causes restrictive lung disease and is commonly seen in stonecutters and sandblasters?

- A. Coal workers' pneumoconiosis
- B. Silicosis
- C. Sarcoidosis
- D. Actinomycosis

24) What complication is most strongly associated with silicosis?

- A. Asthma
- B. Tuberculosis
- C. Pulmonary embolism
- D. Lung abscess

25) Which interstitial lung disease is characterized by repeated cycles of injury and wound healing?

- A. Emphysema
- B. Idiopathic pulmonary fibrosis
- C. Pulmonary embolism
- D. Sarcoidosis

26) A 35-year-old bird breeder presents with cough and dyspnea. What is the most likely diagnosis?

- A. Sarcoidosis
- B. Tuberculosis
- C. Hypersensitivity pneumonitis
- D. Small cell carcinoma

Answers

| | | | |
|----|---|----|---|
| 1 | C | 15 | B |
| 2 | D | 16 | C |
| 3 | D | 17 | C |
| 4 | C | 18 | B |
| 5 | A | 19 | C |
| 6 | B | 20 | D |
| 7 | C | 21 | B |
| 8 | A | 22 | B |
| 9 | B | 23 | B |
| 10 | D | 24 | B |
| 11 | D | 25 | B |
| 12 | A | 26 | C |
| 13 | B | | |
| 14 | B | | |

CARCINOID TUMORS

1. What is the typical age group for carcinoid tumors?

- A. Children under 10
- B. Adolescents
- C. Middle age < 40 years
- D. Elderly > 65 years

2. From which cells do carcinoid tumors arise?

- A. Squamous cells
- B. Goblet cells
- C. Neuroendocrine cells
- D. Hepatocytes

3. Which of the following is NOT a common site for carcinoid tumors outside the gut?

- A. Bronchus
- B. Mediastinum
- C. Pancreas
- D. Spleen

4. How would you describe the general behavior of carcinoid tumors?

- A. Always benign
- B. Low-grade malignancy but can metastasize
- C. Highly aggressive
- D. Non-neoplastic

5. Which of the following is a typical gross feature of a carcinoid tumor?

- A. Subserosal location
- B. Submucosal mass projecting into the intestinal lumen
- C. Large necrotic mass
- D. Cystic lesion filled with fluid

6. What is the usual size and color of a carcinoid tumor?

- A. Large and black
- B. Small and yellowish-brown
- C. Medium and red
- D. Variable size and green

| | | | | | |
|------|------|------|------|------|------|
| 1) C | 2) C | 3) D | 4) B | 5) B | 6) B |
|------|------|------|------|------|------|

7. On microscopy, the tumor cells of carcinoid tumor usually appear as:

- A. Pleomorphic and anaplastic
- B. Solid groups of small uniform cells
- C. Giant multinucleated cells
- D. Sheets of squamous cells

8. Which description best matches the cytoplasm and arrangement of carcinoid tumor cells?

- A. Clear or pink granular, in nests or rosette-like
- B. Foamy with vacuoles, in cords
- C. Dense and blue, in sheets
- D. Clear with mucin, in lobules

9. Which of the following is an ultrastructural feature (E/M) of carcinoid tumors?

- A. Keratin pearls
- B. Cytoplasmic dense core neurosecretory granules
- C. Myelin figures
- D. Nuclear grooves

10. Carcinoid tumors spread through all of the following routes EXCEPT:

- A. Direct invasion into peritoneal cavity
- B. Lymphatic spread to regional lymph nodes
- C. Hematogenous spread to liver
- D. Intravascular emboli to brain

11. Which of the following is NOT a feature of carcinoid syndrome?

- A. Fibrosis in the right side of the heart
- B. Bronchospasm
- C. Flushing of the face
- D. Cyanosis of the toes

12. Why is the left side of the heart usually spared in carcinoid syndrome?

- A. Left heart is resistant to fibrosis
- B. Tumor cells don't reach left side
- C. Bioactive products are decarboxylated in the liver and lungs
- D. Carcinoid tumors do not metastasize

| | | | | | |
|------|------|------|-------|-------|-------|
| 7) B | 8) A | 9) B | 10) D | 11) D | 12) C |
|------|------|------|-------|-------|-------|

HEPATITIS

1. What is the definition of hepatitis?

- A. Viral infection of the gallbladder
- B. Inflammation of the pancreas
- C. Inflammation of hepatocytes and cell injury
- D. Autoimmune destruction of bile ducts

2. Which of the following is *not* a viral cause of hepatitis?

- A. Hepatitis A
- B. Herpes Simplex Virus
- C. Actinomycosis
- D. Cytomegalovirus

3. What is the mode of transmission of Hepatitis A virus?

- A. Sexual contact
- B. Blood transfusion
- C. Ingestion of contaminated food or water
- D. Inhalation

4. What immune mechanism causes hepatocyte damage in Hepatitis A infection?

- A. B-cell activation
- B. Autoantibodies
- C. T cell-mediated cytotoxicity
- D. Direct cytopathic effect of the virus

5. Which statement is true about Hepatitis A?

- A. It often leads to chronic liver disease
- B. It is always symptomatic in children
- C. IgM anti-HAV appears early and later declines
- D. It is transmitted by the parenteral route

6. Hepatitis B virus is what type of virus?

- A. Single-stranded RNA virus
- B. Double-stranded circular DNA virus
- C. Linear double-stranded RNA virus
- D. Retrovirus

7. Which HBV protein is secreted into the blood and used as a marker of infectivity?

- A. HBcAg
- B. HBsAg
- C. HBeAg
- D. HBX protein

8. Which HBV protein plays a role in hepatocellular carcinoma development?

- A. HBcAg
- B. HBsAg
- C. DNA polymerase
- D. HBX protein

9. Which of the following is *not* a possible outcome of Hepatitis B infection?

- A. Acute hepatitis
- B. Chronic hepatitis
- C. Cystic fibrosis
- D. Hepatocellular carcinoma

10. What test confirms acute HBV infection?

- A. Anti-HCV antibodies
- B. IgM anti-HAV
- C. HBsAg and IgM anti-HBc
- D. Stool for ova and parasites

11. Why is there no effective vaccine for Hepatitis C?

- A. It is not immunogenic
- B. It mutates rapidly, having many strains
- C. It infects only animals
- D. It doesn't enter the bloodstream

12. Which of the following is true about Hepatitis C?

- A. It never leads to chronic hepatitis
- B. IgG anti-HCV gives lifelong immunity
- C. It can lead to cirrhosis and hepatocellular carcinoma
- D. It is usually spread by eating shellfish

13. Hepatitis D virus requires which other virus to replicate?

- A. HCV
- B. HAV
- C. HBV
- D. HEV

14. What is the most likely outcome of HDV *superinfection* in a chronic HBV carrier?

- A. Complete recovery
- B. Fulminant hepatitis in all cases
- C. Chronic hepatitis and cirrhosis
- D. Lifelong immunity without complications

15. What distinguishes co-infection from super-infection in HDV?

- A. Mode of transmission
- B. Severity of symptoms
- C. Order of HBV and HDV infection
- D. Presence of antibodies

16. What is a major risk of Hepatitis E, especially in pregnant women?

- A. Chronic liver disease
- B. Hepatocellular carcinoma
- C. High mortality
- D. No symptoms at all

Answers

| | | | |
|---|---|----|---|
| 1 | C | 9 | C |
| 2 | C | 10 | C |
| 3 | C | 11 | B |
| 4 | C | 12 | C |
| 5 | C | 13 | C |
| 6 | B | 14 | C |
| 7 | C | 15 | C |
| 8 | D | 16 | C |

1. What defines the carrier state in viral hepatitis?

- A. Symptoms that last more than 6 months
- B. Inability to transmit the virus
- C. Asymptomatic presence of the virus with ability to transmit
- D. Presence of jaundice and fever

2. The symptomatic phases of acute viral hepatitis include all the following EXCEPT:

- A. Incubation
- B. Convalescence
- C. Carrier stage
- D. Symptomatic icteric phase

3. What is a key gross pathological feature of acute hepatitis?

- A. Liver is atrophied with wrinkled capsule
- B. Greenish color, firm consistency, and tense capsule
- C. Pale and soft liver with granular surface
- D. Shrunken liver with fibrotic nodules

4. Which of the following is NOT a histologic feature of hepatocyte injury in acute hepatitis?

- A. Ballooning degeneration
- B. Councilman bodies
- C. Bridging fibrosis
- D. Cholestasis

5. What characterizes interface hepatitis in acute viral hepatitis?

- A. Fatty change in perivenular hepatocytes
- B. Necrosis at the junction of portal tracts and adjacent parenchyma
- C. Bile duct hyperplasia
- D. Kupffer cell atrophy

6. Which of the following is a microscopic sign of hepatocyte regeneration during recovery from acute hepatitis?

- A. Kupffer cell atrophy
- B. Fibrosis bridging portal tracts
- C. Kupffer cell hyperplasia and hepatocyte mitosis
- D. Portal vein thrombosis

7. Chronic viral hepatitis is defined as hepatic inflammation lasting:

- A. More than 1 month
- B. More than 3 months
- C. More than 6 months
- D. Indefinitely

8. Which hepatitis viruses are common causes of chronic hepatitis?

- A. HAV and HEV
- B. HBV and HCV
- C. HDV and HEV
- D. CMV and EBV

9. What is a hallmark microscopic finding of chronic hepatitis due to HCV?

- A. Councilman bodies only
- B. Hydropic degeneration with steatosis and lymphoid aggregates
- C. Central vein thrombosis
- D. Iron overload

10. Which of the following best defines piece-meal necrosis (interface hepatitis)?

- A. Apoptosis of hepatocytes within central vein
- B. Bridging fibrosis between portal tracts
- C. Necrosis between inflamed portal tracts and periportal hepatocytes
- D. Necrosis of entire hepatic lobules

11. What cells typically infiltrate the portal tracts in chronic viral hepatitis?

- A. Neutrophils and eosinophils
- B. Lymphocytes, plasma cells, macrophages
- C. Mast cells and eosinophils
- D. NK cells and dendritic cells


12. What type of fibrosis is characteristic of advanced chronic hepatitis?

- A. Only perivenular fibrosis
- B. Periportal fibrosis with complete regeneration
- C. Bridging fibrosis (portal-portal, portal-central)
- D. Diffuse sinusoidal fibrosis without inflammation

13. What is the end-stage of chronic hepatitis called?

- A. Fulminant hepatitis
- B. Cirrhosis
- C. Acute hepatic failure
- D. Cholestatic hepatitis

Answers

| | | | |
|---|---|--|---|
| 1 | C | 9 | B |
| 2 | C | 10 | C |
| 3 | B | 11 | B |
| 4 | C | 12 | C |
| 5 | B | 13 | B |
| 6 | C |  | |
| 7 | C | | |
| 8 | B | | |

CIRRHOSIS

1. Which of the following best describes cirrhosis?

- A. Acute inflammation of the liver with regeneration
- B. Chronic, irreversible liver disease with nodular regeneration and fibrosis
- C. Acute necrosis of hepatocytes without regeneration
- D. Reversible fatty change of the liver

2. Which feature is *not* characteristic of cirrhosis?

- A. Regenerating nodules
- B. Bridging fibrous septa
- C. Maintenance of normal lobular architecture
- D. Degeneration and necrosis of hepatocytes

3. Cirrhosis is classified morphologically based on:

- A. Degree of hepatocyte necrosis
- B. Type of viral infection
- C. Size of regenerating nodules
- D. Cause of liver failure

4. Which statement about micronodular cirrhosis is correct?

- A. Nodules are larger than 3 mm
- B. It is most commonly due to viral hepatitis
- C. Commonly seen in alcoholic and biliary cirrhosis
- D. It has no fibrous septa formation

5. In macronodular cirrhosis, nodules typically range in size from:

- A. <1 mm
- B. 1–2 mm
- C. 2–3 mm
- D. >5 mm

6. Which histologic feature is NOT associated with cirrhosis?

- A. Loss of central vein
- B. Bridging fibrosis
- C. Preservation of normal portal triad
- D. Nodular regeneration of hepatocytes

7. The key fibrogenic cells involved in cirrhosis are:

- A. Kupffer cells
- B. Ito (stellate) cells
- C. Hepatocytes
- D. Bile duct epithelial cells

8. The cytokine TGF- β in cirrhosis primarily promotes:

- A. Apoptosis of hepatocytes
- B. Collagen synthesis by stellate cells
- C. Regeneration of bile ducts
- D. Sinusoidal dilation

9. Alcoholic cirrhosis is commonly associated with all EXCEPT:

- A. Mallory bodies
- B. Micro-nodular cirrhosis
- C. Ballooning degeneration
- D. Lymphocytic infiltrate of bile ducts

10. Which is a common feature in primary biliary cirrhosis?

- A. Autoimmune destruction of small intrahepatic bile ducts
- B. Obstruction due to gallstones
- C. Perivenular necrosis
- D. Viral hepatitis B infection

11. Primary biliary cirrhosis is most commonly seen in:

- A. Children
- B. Young males
- C. Middle-aged women
- D. Elderly men

12. A characteristic microscopic finding in early primary biliary cirrhosis is:

- A. Ballooning degeneration
- B. Granulomatous inflammation of bile ducts
- C. Bridging central vein necrosis
- D. Steatosis with Mallory bodies

13. What is a prominent histological feature in secondary biliary cirrhosis?

- A. Ballooned hepatocytes with eosinophilic inclusions
- B. Extra- and intra-hepatic cholestasis with bile duct rupture
- C. Lymphoid follicles in portal tracts
- D. Interface hepatitis

14. Which of the following is NOT a complication of cirrhosis?

- A. Portal hypertension
- B. Hepatocellular carcinoma
- C. Chronic renal failure
- D. Ascites

15. In cirrhosis, deposition of type I and III collagen occurs primarily in:

- A. Portal vein walls
- B. Space of Disse
- C. Glisson's capsule
- D. Central arteries

Answers

| | | | |
|----------|----------|-----------|----------|
| 1 | B | 9 | D |
| 2 | C | 10 | A |
| 3 | C | 11 | C |
| 4 | C | 12 | B |
| 5 | C | 13 | B |
| 6 | C | 14 | C |
| 7 | B | 15 | B |
| 8 | B | | |

LIVER TUMORS

1. Which of the following is the most common liver tumor overall?

- A. Hepatic adenoma
 - B. Cavernous hemangioma
 - C. Hepatocellular carcinoma
 - D. Metastatic carcinoma
-

2. Which tumor is classified as a benign epithelial tumor of hepatocytes?

- A. Bile duct adenoma
 - B. Hepatic adenoma
 - C. Angiosarcoma
 - D. Cholangiocarcinoma
-

3. Which primary liver tumor arises from mesenchymal origin and is malignant?

- A. Cavernous hemangioma
 - B. Bile duct adenoma
 - C. Angiosarcoma
 - D. Cholangiocarcinoma
-

4. All of the following are predisposing factors for HCC except:

- A. Chronic hepatitis B infection
 - B. Aflatoxin-contaminated food
 - C. Primary sclerosing cholangitis
 - D. Alcoholic liver disease
-

5. Which of the following statements about HCC is TRUE?

- A. It commonly arises in females under 30
 - B. Most tumors are confined to one hepatic lobe without metastasis
 - C. It may present as unifocal, multifocal, or diffuse infiltrative tumor
 - D. It arises only in non-cirrhotic livers
-

6. A well-differentiated hepatocellular carcinoma shows which microscopic feature?

- A. Anaplastic spindle cells
 - B. Fibrous septa forming nodules
 - C. Polyhedral cells forming pseudoglandular acini
 - D. Abundant lymphoid aggregates
-

7. Which statement about HCC spread is INCORRECT?

- A. It spreads intra-hepatically via portal vein branches
 - B. It may spread to lungs via hepatic veins
 - C. It always spreads via lymphatics first
 - D. It can directly invade surrounding structures
-

8. What is a common paraneoplastic marker for HCC diagnosis?

- A. CEA
 - B. CA19-9
 - C. Alpha-fetoprotein (>1000 IU)
 - D. CA-125
-

9. Which of the following is TRUE regarding the fibrolamellar variant of HCC?

- A. It is common in elderly males with cirrhosis
 - B. It is associated with HBV and HCV
 - C. It has worse prognosis than conventional HCC
 - D. It occurs in young adults and shows fibrous bands microscopically
-

10. Hepatoblastoma typically occurs in which age group?

- A. Neonates
 - B. Infants and young children
 - C. Adolescents
 - D. Adults over 60
-

11. Which histologic finding is characteristic of hepatoblastoma?

- A. Mallory bodies and bile pigment
- B. Undifferentiated blastema only
- C. Mixture of immature hepatocytes and mesenchymal tissue (e.g., bone, cartilage)
- D. Normal lobular hepatic architecture

12. Which tumor arises from bile duct epithelium and shows a desmoplastic reaction?

- A. HCC
- B. Angiosarcoma
- C. Cholangiocarcinoma
- D. Hepatoblastoma

13. A liver tumor showing irregular tubules lined by malignant cuboidal cells in fibrous stroma is most likely:

- A. Hepatic adenoma
- B. Hepatoblastoma
- C. Cholangiocarcinoma
- D. Metastatic carcinoma

14. Which feature is NOT typical of cholangiocarcinoma?

- A. Desmoplastic stroma
- B. Presence of bile pigment in cells
- C. Malignant gland formation
- D. Absence of Mallory bodies

15. Which of the following is most suggestive of inferior vena cava obstruction due to HCC?

- A. Esophageal varices
- B. Splenomegaly
- C. Edema of lower limbs
- D. Jaundice

Answers

| | | | |
|----------|----------|-----------|----------|
| 1 | D | 9 | D |
| 2 | B | 10 | B |
| 3 | C | 11 | C |
| 4 | C | 12 | C |
| 5 | C | 13 | C |
| 6 | C | 14 | B |
| 7 | C | 15 | C |
| 8 | C | | |



Glomerular Injury (Pathogenesis + Nephritic)

1. Which of the following is the most common mechanism of glomerular injury?

- A. Toxin-induced epithelial damage
- B. Hemodynamic stress
- C. Antibody-mediated immune complex deposition
- D. NSAID-induced nephropathy

2. In anti-glomerular basement membrane (anti-GBM) nephritis, the pattern of immune complex deposition is best described as:

- A. Granular mesangial deposits
- B. Linear deposits along the GBM
- C. Nodular mesangial sclerosis
- D. Irregular tubular basement membrane deposition

3. Goodpasture syndrome is characterized by:

- A. Granular immune complex deposits in mesangium
- B. Anti-GBM antibodies producing linear deposition
- C. Deposition of immune complexes in subepithelial zone
- D. Immune complexes involving systemic lupus erythematosus

4. The immune complexes in Heymann nephritis are formed by antibodies directed against:

- A. Mesangial cells
- B. Endothelial cell antigens
- C. Visceral epithelial cell antigens
- D. Subendothelial matrix antigens

5. Which of the following best describes immune complex deposition in membranous glomerulonephritis?

- A. Linear GBM pattern
- B. Subepithelial granular deposits
- C. Subendothelial ribbon-like deposits
- D. Nodular sclerosis

6. "Planted antigens" in the glomerulus may originate from:

- A. Genetic mutations of podocytes
- B. Degraded complement fragments
- C. Drugs, infections, or immune complexes
- D. Amyloid precursor protein

7. In SLE-associated glomerulonephritis, immune injury is mainly caused by:

- A. Anti-GBM linear antibody deposition
- B. Circulating immune complexes involving nuclear antigens
- C. T-cell mediated cytotoxicity
- D. Vascular thrombosis

8. In circulating immune complex-mediated GN (Type III hypersensitivity), where are immune complexes typically deposited?

- A. Only subepithelial
- B. Only subendothelial
- C. Mesangial, subendothelial, and subepithelial areas
- D. Juxtaglomerular apparatus only

9. What is the main immune effector mechanism causing damage in Type III hypersensitivity glomerulonephritis?

- A. T-cell cytotoxicity
- B. NK cell activation
- C. Complement activation and neutrophil infiltration
- D. Mast cell degranulation

10. Epithelial cell injury in glomeruli can result in all of the following except:

- A. Foot process effacement
- B. Proteinuria
- C. Increased collagen deposition in the tubules
- D. Structural damage to podocytes

11) All are features of nephritic syndrome Except: (سنين سابقه)

- a) Hypertension
- b) Polyuria
- c) Hematuria
- d) Mild proteinuria

12) As regards rapidly progressing glomerulonephritis (crescentic), all the following are true except: (سنين سابقه)

- a) There is a rapid progress to renal failure and death.
- b) SLE, Goodpasture syndrome are the main causes.
- c) There is crescent formation in glomeruli on L/M.
- d) Foot processes of podocytes appear fused on E/M.

ANSWER KEY

1) C

2) B

3) B

4) C

5) B

6) C

7) B

8) C

9) C

10) C

11) D

12) D



MCQS (PYELONEPHRITIS)

1) Factors predisposing to pyelonephritis include all EXCEPT:

- a) Urinary tract obstruction
- b) Urinary tract instrumentation
- c) Schistosomiasis
- d) Hypertension
- e) Diabetes

2) Females are more susceptible to urinary tract infection because:

- a) The immune system is weaker in females
- b) High estrogen level
- c) Low testosterone level
- d) Short urethra
- e) Higher incidence of diabetes

3) Routes of infection in pyelonephritis:

- a) Ascending infection from the urinary bladder
- b) Lymphatic spread from the intestine
- c) Blood spread from a septic focus
- d) All the above
- e) None of the above

4) Thyroidization is a histologic feature of:

- a) Hydronephrosis
- b) Pyonephrosis
- c) Acute pyelonephritis
- d) Chronic pyelonephritis
- e) All the above

5) The most common mechanism in pathogenesis of chronic pyelonephritis:

- a) Ascending infection.
- b) Reflux nephropathy.
- c) Obstructive nephropathy.
- d) Hematogenous infection.



6) The following factors are predisposing factor to pyelonephritis EXCEPT:

- a) Diabetes mellitus.
- b) Pregnancy.
- c) Vesico-ureteric reflux.
- d) Males less than 40 years old.
- e) Cystoscopy.

7) All the followings are associated with acute pyelonephritis, EXCEPT:

- a) Unilateral or bilateral suppuration
- b) Acute tubular inflammation and destruction.
- c) Glomerular destruction is a common feature.
- d) Due to hematogenous or ascending spread.

8) Asymmetrical contracted kidney is caused by

- a) Chronic glomerulonephritis
- b) Chronic pyelonephritis
- c) Neither
- d) Both

9) Urinary tract infection in young women with cystitis and low of bacteriuria is commonly caused by:

- a) Staphylococcus Saprophyticus
- b) Klebsiella
- c) E. coli
- d) Pseudomonas

Answers

| | | | |
|----------|----------|----------|----------|
| 1 | D | 6 | D |
| 2 | D | 7 | C |
| 3 | D | 8 | B |
| 4 | D | 9 | C |
| 5 | B | | |

RENAL TUMORS

1. Gross features of renal cell carcinoma include all EXCEPT:

- a) It is commonly centered in the cortex
- b) It is surrounded by a true capsule
- c) It is commonly well circumscribed
- d) Cut surface is golden yellow
- e) Cut surface shows hemorrhage and necrosis.

2. Histologic features of renal cell carcinoma include all EXCEPT:

- a) It may show tubular or papillary formations
- b) The cells have clear or granular cytoplasm
- c) The cells contain mucin
- d) The cell may show sarcomatoid appearance
- e) The stroma is very vascular.

3. The metaplastic lesions which may occur in the bladder epithelium include:

- a) Squamous metaplasia without keratinization
- b) Squamous metaplasia with keratinization
- c) Glandular metaplasia
- d) Mesonephric metaplasia
- e) All of the above.

4. Nephroblastoma is called:

- a) Warthin's tumor
- b) Wilm's tumor
- c) Benign mixed tumor
- d) Pancoast's tumor
- e) Yolk sac tumor.

B**C****E****B**

5. Wilm's tumor consists of:

- a) Blastematos tissue
- b) Mesenchymal tissue
- c) Epithelial tissue
- d) All of the above
- e) None of the above.

6. Out of various histological types of renal cell carcinoma (RCC), the following type has the worst prognosis

- a) Clearcelltype
- b) Granular cell type
- c) Sarcomatoidtype
- d) Papillary type

7. The following are NOT features of oncocytoma EXCEPT

- a) Ill defined tumor mass
- b) Yellow brown in color
- c) Usually associated with hemorrhage & necrosis
- d) Large masses associated with prominent scar
- e) Composed of spindle shaped cells

8. Renal cell carcinoma (RCC) characterized by

- a) Papillary type is hyper vascular
- b) Clear cell variant is the most common
- c) Chromophobe RCC shows perivascular arrangement of malignant cells
- d) All of above
- e) Non of above

| | | | |
|---|---|---|---|
| D | C | D | D |
|---|---|---|---|

9. All are characters of renal cell carcinoma EXCEPT

- a) Early invades renal vein
- b) More frequent in children than adults
- c) Often composed of large cells with abundant clear cytoplasm
- d) May present with total & profuse hematuria
- e) One of the tumors which often metastasize to bone

10. RCC is NOT associated with the following EXCEPT

- a) Painful hematuria
- b) Polycythemia
- c) Hypotension
- d) Painless loin mass

11. Which cancer tend to spread by blood permeation

- a) Hemangiosarcoma
- b) Renal cell carcinoma
- c) Basal cell carcinoma
- d) Brain glioma
- e) Hepatocellular carcinoma

12. Wilms tumor characterized by all of the following EXCEPT

- a) Involves both kidneys in 7% of cases
- b) Usually presents as abdominal mass
- c) Rarely metastasize to lung
- d) Usually affects infants

13. The blastomatous tissue consists of;

- a) Spindle-shaped cells
- b) Small primitive cells
- c) Small muscle cells
- d) Malignant epithelial cells
- e) Neuroendocrine cells.

| | | | | |
|---|---|---|---|---|
| B | B | B | C | B |
|---|---|---|---|---|

14. Schistosomiasis of the bladder predisposes to:

- a) Cystitis
- b) Stone formation
- c) Bladder carcinoma
- d) All of the above
- e) None of the above.

15. Leukoplakia of the urinary bladder means transformation of the bladder epithelium into:

- a) Non-keratinized squamous epithelium
- b) Keratinized epithelium
- c) Glandular epithelium
- d) Atrophic epithelium
- e) Dysplastic epithelium

16. Adenocarcinoma of the urinary bladder may arise from:

- a) Cystitis glandularis
- b) Urachal remnants
- c) All of the above
- d) None of the above

17. Histologic types of bladder carcinoma include:

- a) Squamous cell carcinoma
- b) Transitional cell carcinoma
- c) Adenocarcinoma
- d) Sarcomatoid carcinoma
- e) All of the above.

18. Schistosomiasis of the urinary bladder is implicated in the following type of bladder tumor:

- a) Tr. C. C.
- b) Sq.C.C
- c) Adenocarcinoma.
- d) Adenoacanthoma.

| | | | | |
|---|---|---|---|---|
| D | B | A | E | B |
|---|---|---|---|---|

19. Transitional cell papilloma of urinary bladder is:

- a) A premalignant lesion.
- b) Formed of papillae attached to the mucosa by thin pedicle.
- c) Formed of central loose fibro-vascular connective tissue core covered by several layers of transitional epithelium,in each papillary.
- d) All of the above.
- e) None of the above.

20. Bladder carcinoma characterized by :

- a) May occur below 50 years in Egypt.
- b) Smoking, aniline dye, and cyclophosphamide are known etiologic factors.
- c) Bilharzial type is more common in Egypt.
- d) All of above.
- e) None of above.

21. All are NOT true for bladder carcinoma EXCEPT:

- a) It is common in lateral and posterior wall.
- b) Ulcerative carcinoma is the commonest gross pattern.
- c) Transitional cell carcinoma is common in bilharzial cases.
- d) Spread to hypogastric and iliac lymph node is common in bilharziasis.

22. Transitional cell carcinoma of the bladder characterized by :

- a) Increased incidence among workers in the aniline dye industry.
- b) An increased incidence in Egypt.
- c) Oftenly, have a papillary structure.
- d) All of the above.
- e) None of the above.

23. Hematuria, characterized by:

- a) Terminal hematuria is due to hemorrhagic blood diseases.
- b) is commonly caused by Bilharzial cystitis in Egypt.
- c) Both.
- d) None

| | | | | |
|---|---|---|---|---|
| D | C | A | D | B |
|---|---|---|---|---|