

① Lungs 3-

③

②

SN

④

Question -1

? (like hypoxia/water)

A 9-year-old girl has complained of difficulty breathing for the past week. On physical examination, her lung fields are clear to auscultation. Her heart rate is regular. A chest radiograph shows prominent hilar lymphadenopathy along with a 1 cm peripheral right lung nodule in the middle lobe. A routine bacterial culture reveals no pathogens. Which of the following conditions is she most likely to have?

A Hypersensitivity pneumonitis

B Mycobacterium tuberculosis infection ✓

C Bronchial carcinoid tumor

D Infective endocarditis

E Goodpasture syndrome

Question -2

A 36-year-old woman had increasing dyspnea for 8 years. She has no cough or increased sputum production. On physical examination there is hyper resonance. A chest radiograph reveals increased lung volumes with flattening of the diaphragmatic leaves bilaterally. Which of the following laboratory findings is she most likely to have?

A Decreased serum ceruloplasmin

B Increased sweat chloride

C Decreased serum alpha-1-antitrypsin ✓

D Positive urine opiates

E Positive antinuclear antibody test

ANS- C

Question -3

A 55-year-old female had fever and dyspnea for a month along with a 2 kg weight loss. A chest radiograph shows a reticulo-nodular pattern along with prominent hilar lymphadenopathy, and Microscopic examination of transbronchial lung biopsy shows no viral inclusions, no fungi, no acid fast bacilli, and no atypical cells. Which of the following diseases is she most likely to have?

A Silicosis

B Sarcoidosis

C Asbestosis

D Tuberculosis

E Usual interstitial pneumonitis

→ A multi system disease characterized by ~~by~~ non caseating granuloma associated with encephalopathy and coagulopathy

Question -4 ?

At autopsy, a 60-year-old man is found to have a peripheral 7 cm area of golden-yellow consolidation on sectioning of the left lung. Microscopically, this area has alveoli filled with foamy macrophages. Which of the following conditions involving his lung is most likely to be responsible for this finding?

A. Cystic fibrosis

B. Adenocarcinoma

C. Silicosis

D. Squamous cell carcinoma ✓

E. Malignant mesothelioma

Question -5

A 65-year-old man had increasing dyspnea for 5 years. On physical examination his lungs are hyper-resonant. Tactile vocal fremitus is slightly decreased over all lung fields and Scattered expiratory wheezes. Chest radiograph that reveals increased lung volumes and flattening of the diaphragmatic leaves. Which of the following inhaled substances, which increases the elaboration of neutrophil elastase, is most likely to cause her pulmonary disease?

A Chlorine

B Silica

C Carbon monoxide

D. Nicotine

E Carbon

Nicotine

ANS- D

Question -6

A 44-year-old non-smoker woman has a fever and cough for the past 4 days. There are decreased breath sounds over the right upper lung. She is given a course of antibiotic therapy, but her cough persists. A month later her chest x-ray now reveals a 3 cm peripheral mass in the right upper lobe. Which of the following neoplasms is most likely to be present in this woman?

- A Squamous cell carcinoma
- B Small cell anaplastic carcinoma

Adenocarcinoma

C) Adenocarcinoma

- D Mesothelioma
- E Carcinoid tumor

Question -7 ?

Three weeks after visiting her grandmother dying from a respiratory tract infection, a healthy 5-year-old girl develops a fever along with wheezing. A chest radiograph reveals a solitary 2 cm peripheral mid-lung nodule and marked hilar lymphadenopathy. These findings are most consistent with infection by which of the following organisms?

C, Mycobacterium tuberculosis

M-TB

- B Candida albicans
- C Coccidioides immitis
- D Aspergillus flavus
- E Streptococcus pneumoniae

Question -8 ?

A 65-year-old man had no major medical problems prior to the past year, when he noted increasing malaise with an 8 kg weight loss. He is a non-smoker. On physical examination, he has non-tender supraclavicular lymphadenopathy. A chest x-ray shows multiple solid nodules ranging from 1 to 3 cm scattered throughout all lung fields. Which of the following pathologic processes in his lungs is most likely to account for these findings?

- A Pulmonary infarctions
- B Foreign body aspiration

- C. Metastatic carcinoma
- D Nocardia asteroides infection
- E Silicosis

Question-9

A 43-year-old woman who does not smoke, becomes increasingly dyspneic over 8 years' time. She is afebrile, no cough or sputum production. On physical examination she has decreased breath sounds with hyperresonance in all lung fields. A chest radiograph reveals increased lucency of all lung fields. Laboratory studies show her serum alpha-1-antitrypsin level is 18 mg/dL. Which of the following microscopic portions of the lung is most likely to be affected by her condition?

- A Lymphatic channel
- B. Alveolar duct
- C Bronchial artery
- D Interstitium
- E Terminal bronchiole

Question-10

?

A 45-year-old woman has a 1 year history of episodic dyspnea. On physical examination there are expiratory wheezes. Her chest radiograph shows a few small 0.5 cm perihilar nodules. Laboratory studies show an elevated serum IgE along with peripheral blood eosinophilia. Which of the following pathologic findings is most likely present in her bronchi?

A. Non-invasive aspergillosis

- B Blastomycosis
- C Invasive candidiasis
- D Wegener granulomatosis
- E Cytomegalovirus

Question-11

A 10-year-old boy accidentally inhales a small peanut, which lodges in one of his bronchi. A chest x-ray reveals the mediastinum to be shifted toward the side of the obstruction. Which of the following pulmonary abnormalities is most likely present in this boy?

- A. Absorptive atelectasis / obstruction / Resorption
- B. Compression atelectasis
- C. Contraction atelectasis
- D. Patchy atelectasis
- E. Hyaline membrane disease

ANS- A

Question-12 ?

Paraneoplastic peripheral neuropathy is most common seen with:

- A. Pancreatic carcinoma
- B. Hepatocellular carcinoma
- C. Ovarian carcinoma
- D. Breast carcinoma
- E. Small cell carcinoma of lung

Small cell CA

Question-13

Cigarette smoking causes which lung cancer?

- A. Squamous cell carcinoma
- B. Adenocarcinoma
- C. Large cell carcinoma
- D. Bronchioalveolar carcinoma
- E. Oat cell carcinoma

Squamous cell CA

pan-lobular emphysema

Question-14

A 43-year-old female has a known history of alpha-1 antitrypsin deficiency and micronodular cirrhosis. Her pulmonary reserve has been gradually decreasing over the past few years. What pathologic process is likely to be found on biopsy of her lung?

- A. Alveolar proteinosis.
- B. Chronic viral pneumonia.
- C. Intralobular sequestration.
- D. Panacinar emphysema.
- E. Pulmonary hypertension.

ANS- D

Question-15

A 20 year woman presents with sudden, severe right sided chest pain that developed shortly after she had been placing heavy boxes on shelves in her kitchen. Breath sounds are markedly decreased on the right, and the right lung is hyper resonant to percussion. Which of the following is most likely present in this individual?

- A. Pneumoconiosis
- B. Pneumocystis infection
- C. Bacterial pneumonia
- D. Viral pneumonia
- E. Pneumothorax

Pneumothorax

S. pneumoniae → Abscess formation.

Question-16

Abscess formation in lung is most common in

- A. Lobar pneumonia
- B. Klebsiella pneumonia
- C. Viral pneumonia
- D. Staphylococcal pneumonia
- E. Streptococcal pneumonia

ANS- D

Question-17

Cigarette smoking causes which lung cancer?

- A. Squamous cell carcinoma

Squamous cell CA

B. Adenocarcinoma

C. Large cell carcinoma

D. Bronchioalveolar carcinoma

E. Oat cell carcinoma

ANS- A

* Question-18

The barrel chest appearance is an effect of what disease

A. Emphyema

B. Silicosis

C. TB

D. Atelectasis

E. Emphysema

ANS- E

Emphysema

Question-19

Emphysema affecting respiratory bronchioles is:

A. Panacinar

B. Paraseptal

C. Centriacinar

D. Distal acinar

E. Periseptal

ANS- C

Centriacinar

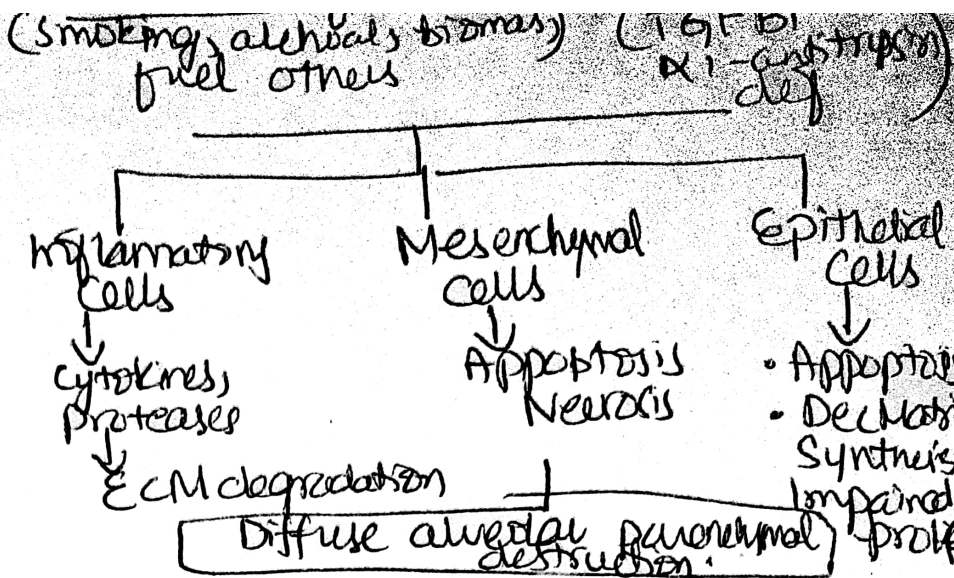
Question-20

Destruction of elastic and muscular tissue is the most significant lesion in

A. Lipoid pneumonia

- B. Viral pneumonia
- C. Atelectasis
- D. Bronchiectasis**
- E. Tuberculosis

ANS- B



QUESTION 01

A) - A 40-year-old woman becomes increasingly dyspneic over 8 years' time and is afebrile, no cough or sputum production. She has decreased breath sounds with hyper resonance in all lung fields. A chest X-RAY reveals increased lucency of all lung fields with history of alpha-1 antitrypsin deficiency Which is most likely diagnosis? (01)

B) Describe the types of emphysema

- Centriacinar emphysema
- Paracinar emphysema
- Distal emphysema
- Irregular emphysema

C) Discuss the pathogenesis of emphysema

(02)

QUESTION 02

A) - A 45-year-old man had a high grade fever shaking chills and mucopurulent sputum with occasional hemoptysis that worsened over several days. Diffuse crackles are heard at the right lung base. Laboratory studies are as follows:

- hemoglobin: 13.3 g/dL
- platelet count: 291,8000/mm³
- WBC count: 15,240/mm³ with differential count: neutrophils-79%, lymphocytes-16% and monocytes-05. What is most likely diagnosis? pneumonia (01)

B) - Describe the four classic stages of the inflammatory response in lobar pneumonia in terms of temporal features and morphology.

- ① Congestion (04)
- ② Red hepatization
- ③ Grey hepatization
- ④ Resolution

Question -03

Discuss bronchiectasis, in terms of:

↳ permanent dilation of bronchi and bronchioles caused by destruction

A) Definition and predisposing conditions

S. aureus
↑

(02)

B) The types of organisms typically cultured from bronchi

C) Discuss the Reid index.

Ratio of thickness
of submucosal gland to
that of the Bronchial wall
is called as Reid index.

Question - 04

A) Give the histological classification of malignant epithelial lung tumors. (02)

B) Describe the etiology and morphology of adenocarcinoma of lung. (03)

Adenocarcinoma
Histological classification of Malignant epithelial lung tumors.

Adenocarcinoma

Squamous cell carcinoma.

Small cell carcinoma.

Large cell carcinoma.

Adenosquamous carcinoma.

~~Squamous~~ Spindle cell carcinoma

Giant cell carcinoma.

Carcinoid tumor.

Carcinoma of salivary gland

Adenocarcinoma of lung:-

It involves proximal
CGFR-m