

SALAM ALL

Some of you have asked me to give sample questions with similar difficulty to the exam questions to use them as a guide. Others asked for the midterm questions.

Here I am giving 5 questions that are somehow similar to the exam question (style not content!!) and I'm also copying the midterm questions for those who like to have a look

GOOD LUCK

PRACTICE QUESTIONS:

Q1. In bronchial asthma, all of the following histological changes represent irreversible structural abnormality except

- A. Goblet cell hyperplasia
- B. smooth muscle hypertrophy
- C. bronchial wall fibrosis
- D. **Curshmann spirals**
- E. hyperplasia of submucosal mucin secreting glands.

Explanation: this question examines your understanding of airway remodeling; which is the persistent irreversible structural abnormalities occurring after chronic repeated asthma episodes. These include all the above mentioned features except Curshmann spirals which are actually thick mucus around desquamated epithelial cells. This mucus can be secreted during the initial attacks in response to cytokine increase.

Q2. Of the following, the most common indirect lung injury causing ARDS is

- A. pneumonia
- B. burns
- C. **sepsis**
- D. renal failure

Note: In such questions make sure you read the question carefully to know if it's asking about direct or indirect causes!

Q3. Which of the following is incorrect regarding pneumoconiosis

- A. Risk of TB is increased in patients suffering from silicosis
- B. microscopically, whorls of collagen fibers forming nodules is characteristic of silicosis
- C. risk of lung cancer is increased in patients with asbestosis but not those suffering from coal workers pneumoconiosis
- D. **anthracosis is carbon deposition with associated fibrosis.**
- E. mesothelioma is a malignant neoplasm seen almost exclusively in individuals exposed to asbestos.

Q4. The most predominant inflammatory cell in ARDS is

- A. **neutrophil**
- B. mast cell
- C. neutrophil
- D. lymphocyte
- E. plasma cell

Q5. Which of the following combinations is incorrect

- A. TB and central necrosis within the granulomas
- B. idiopathic pulmonary fibrosis and low caveolin levels
- C. small cell carcinoma and central location
- D. **erythema nodosum and granulomas on histology**
- E. passive smoking and lung cancer

Q6. A 60 year old male, a heavy smoker, has a central lung mass. The least probable histological type of this mass is

- A. Squamous cell carcinoma
- B. **adenocarcinoma**
- C. large cell carcinoma
- D. adenocarcinoma

Note: this type of questions aims at testing your knowledge of lung cancer types and their association with smoking, gender and anatomic location.

MIDTERM

1. Neonatal and adult respiratory distress syndromes share all of the following characteristics except:

- A. low surfactant level at a certain stage of the disease
- B. edema fluid and fibrin lining the alveoli
- C. hypoxemia
- D. numerous neutrophils**
- E. endothelial and epithelial damage.

2. Which of the following patients is most likely suffering from ARDS (acute respiratory distress syndrome)

- A. An 80 year old male who suffered from severe pneumonia for which he was hospitalized and treated by antibiotics. A month later he developed dyspnea, his respiratory rate was 25 breaths per minute
- B. A 55 year old woman who developed sudden shortness of breath while at work. Her oxygen levels were low and her chest X ray showed severe edema.
- C. A 16 year old boy who had a road traffic accident that resulted in several fractures. Three days after admission he became cyanosed. His chest X ray showed bilateral pulmonary infiltrates.**
- D. A 66 year old man who suffered from respiratory distress six days after being diagnosed with septic shock. He died later and postmortem examination revealed large edematous left lung but normal right lung.
- E. A 50 year old man suffering from cardiac failure who developed bilateral pulmonary edema and hypoxia.

3. Which of the following statements is incorrect regarding atelectasis?

- A. Pleural effusion causes Atelectasis which is potentially reversible.
- B. Fibrosing lung diseases can be complicated by an irreversible atelectasis
- C. post-surgical Atelectasis is the result of airway obstruction.
- D. Atelectasis can be complicated by hypoxemia
- E. emphysema can cause obstructive atelectasis.**

4. Which of the following is incorrect about emphysema?

A. Tidal volume is usually decreased

B. Centriacinar emphysema occurs at an earlier age and is more severe in smokers who have alpha 1 antitrypsin deficiency.

C. patients with pure emphysema have normal oxygen levels at the early stages of the disease.

D. there is mesenchymal cell apoptosis resulting in scarring

E. is caused by smoking which stimulates neutrophils to destroy the alveolar as well as the epithelial membrane.

5. Chronic bronchitis is characterized by which of the following?

A. hypertrophy of submucosal glands with normal goblet cells.

B. airflow obstruction that is caused by fibrosis of large bronchi

C. mucus hypersecretion that is caused by histamine and IL-13

D. chronic bronchiolitis with predominant eosinophils.

E. Normal carbon dioxide in the blood

6. Bronchiectasis can be caused by all of the following except

A. acute pneumonia

B. Kartagener syndromes

C. Cystic fibrosis

D. AIDS

E. chronic bronchitis

7. Which of the following combinations is incorrect regarding bronchial asthma:

A. muscle spasm and bronchial obstruction in asthma

B. inhibition of lipooxygenase pathway and drug induced asthma

C. IL 5 and eosinophil activation

D. Curschmann spirals and mucus plugs from sub epithelial mucous gland

E. increased goblet cells and airway remodeling

THANK YOU