# Fellow Exam-Second year

#### 1. Mark the incorrect statement

- A. The recurrent laryngeal nerves are branches of the vagus nerve
- B. Paralyzed vocal cords rest in the abduction position
- C. The left recurrent laryngeal nerve can be damaged by a left mid paratracheal mass
- D. The vallecula is located anterior to the epiglottis

# 2. Mark the correct statement by the Mountain-Dressler's classification of lymph nodes

- A. Station 7 is located in the hilum
- B. Station 5 is located in the aorto-pulmonary window
- C. Stations 4, 10 and 11 are considered mediastinal stations
- D. Station 10 is considered a high mediastinal lymph node

## 3. Mark the correct statement about lymph nodes

- A. Stations 5 and 6 can be accessed by standard TBNA biopsy
- B. Chamberlain procedure cannot access stations 5 and 6
- C. TBNA needles for lymph node biopsy are usually 22-gauge
- D. TBNA biopsies have 100% negative predictive value for diagnosis.

## 4. Regarding TBNA, mark the correct answer:

- A. Can be performed as standard, EBUS-guided and fluoroscopy-guided
- B. Histology TBNA needles are usually 22-gauge
- C. Mediastinal/hilar lymph nodes of <1cm diameter by CT scan do not need to be biopsied for staging of lung cancer
- D. The Wang needle used for TBNA can only biopsy stations 7 and 4

### 5. Mark the incorrect statement regarding TBNA

- A. TBNA of pulmonary nodules should not be performed
- B. Studies have shown that sensitivity of TBNA improves with practice
- C. TBNA has a high specificity in the setting of lung cancer
- D. Granulomas can be seen in TBNA samples from lymph nodes

### 6. Mark the correct statement regarding Transbronchial biopsies of lung (TBBX)

- A. Samples obtained with TBBX are around 1cm in size
- B. TBBX have high yield for the diagnosis of interstitial lung diseases
- C. TBBX increase the yield for diagnosis of PCP on HIV patients
- D. TBBX has high yield for diagnosis of sarcoidosis even in stage 1

#### 7. What is true about TBBX

- A. It is contraindicated in patients using Aspirin
- B. Studies have shown that the risk of developing pneumothorax is 1-6%
- C. It is absolutely contraindicated in patients with hypoxemia who require home O2
- D. Use of clopidrogel (Plavix) does not increase the risk of significant bleeding

#### 8. Mark the correct statement

- A. HIV patients with suspected PCP must have diagnostic BAL and TBBX
- B. TBBX increases the yield for diagnosis of PCP in immunocompromised non-HIV patients
- C. BAL with bacteria up to 100,000 cfu/mL can be considered normal
- D. Immunosupressed patients rarely need bronchoscopy for diagnosis of pulmonary infections

## 9. Based on Mountain-Dressler's classification of lymph nodes, mark the right statement



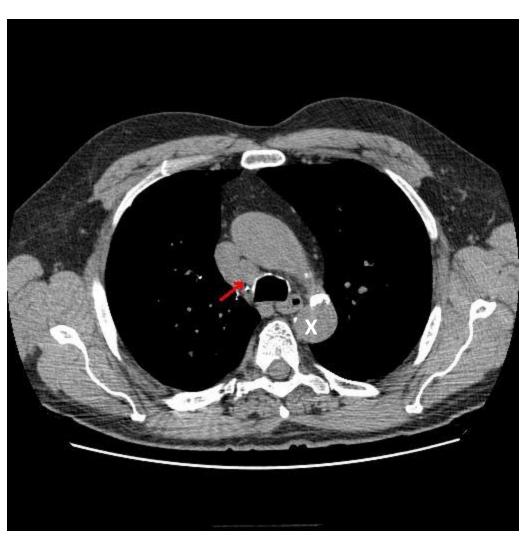
- A. #1 is station 4 R
- B. #2 is station 2 L
- C. #3 is station 8

## 10. 60yo female with COPD, sudden onset SOB and mild hypoxemia (mark the best statement)



- A. Diagnostic bronchoscopy should be performed immediately
- B. Thoracentesis should be performed immediately
- C. CT scan should be done before any procedure
- D. Aggressive lung toileting followed by repeat CXR is indicated initially

## 11. What is the name of the structure marked with an "X":



- A. Esophagus
- B. Pulmonary artery
- C. Ascending aorta
- D. Descending aorta

12. A patient complains of having dark "bloody sputum" (5 times a day) 1 day after bronchoscopy with TBBX. What is the next step:

- A. Admit to the hospital for monitorization
- B. Repeat bronchoscopy to localize bleeding
- C. Order a CXR
- D. Reassure the patient and advise to come to ER if bleeding worsens

13. A patient develops chest tightness and SOB 10 minutes after uneventful bronchoscopy with TBBX. Fluoroscopic exam was negative for pneumothorax at the end of procedure. How would you proceed (mark the best answer):

- A. Give bronchodilators for bronchospasm
- B. Order a stat CXR
- C. Proceed with an emergent bronchoscopy
- D. Administer methylene blue for possible methemoglobinemia

## 14. What is correct about EBUS guided TBNA

- A. It is indicated in all patients with enlarged mediastinal lymph nodes
- B. Cannot be used for diagnosis of sarcoidosis
- C. Gives better diagnostic yield than standard TBNA for lymph nodes <1cm in diameter</li>
- D. Has shown to have more complications than standard TBNA

## 15. Regarding on-site cytology during bronchoscopy with TBNA, mark the incorrect statement

- A. Can increase false-negative results
- B. Is more expensive than standard TBNA sample processing
- C. Requires a special TBNA needle
- D. Can be performed by a pulmonologist