

Fellow exam-third year

1. Bronchoscopy is contraindicated in ICU patients who are on non-invasive mechanical ventilation

- A. True
- B. False

2. Mark the incorrect statement regarding bronchoscopy in the ICU

- A. Patients with impending respiratory failure should be intubated before bronchoscopy
- B. Intubated patients, under sedation, do not need topical anesthetics (e.g. lidocaine)
- C. It is contraindicated in patients with known increased intracranial pressures
- D. A and C are incorrect

3. Mark the correct statement

- A. Therapeutic aspiration of secretions by bronchoscopy is more effective than aggressive pulmonary toileting
- B. Quantitative BAL with $>10,000$ cfu/mL of bacteria, is considered colonization in the setting of Ventilator-associated pneumonia
- C. Bronchoscopy with BAL in febrile neutropenic patients is unsafe and should be avoided
- D. None of the above are correct

4. Mark the correct statement

- A. Patients with massive hemoptysis should have a diagnostic bronchoscopy before endotracheal intubation
- B. Non-invasive ventilation is indicated sometimes in massive hemoptysis
- C. Only 20% of hemoptysis come from bronchial arteries
- D. None of the above are correct

5. After a difficult standard intubation (3 attempts) in a patient with a very anterior larynx, a pneumomediastinum (with no pneumothorax) is noted in the CXR. Ventilator is showing a significant air leak. After the patient is stabilized, what would you do next:

- A. Emergent MRI of chest
- B. Perform a bronchoscopy only if a previous CT chest is abnormal
- C. Perform an emergent bronchoscopy
- D. GI consult for emergent EGD

6. Mark the correct statement about lung transplant patients

- A. TBBX is the gold standard for diagnosis of acute rejection
- B. Surveillance bronchoscopy includes BAL and TBBX
- C. Surveillance bronchoscopy has not shown to improve long-term outcome in transplanted patients
- D. All are correct

7. The use of endobronchial ultrasound (EBUS) increases the yield in the diagnosis of peripheral pulmonary nodules compared to conventional bronchoscopy

- A. True
- B. False

8. In experienced hands, the use of electromagnetic-guidance for peripheral pulmonary nodules has shown to have less risk of pneumothorax compared to percutaneous biopsies.

- A. True
- B. False

9. Mark the correct statement about EBUS-TBNA bronchoscope

- A. The US used in this scope scans at a frequency of 7.5MHz
- B. It has the same resolution as radial-EBUS probes
- C. The biopsy needle exits the scope in a 90 degree angle
- D. All of the above are incorrect

10. Regarding the EBUS-TBNA scope, which is correct

- A. The needle used for biopsy is 15-gauge
- B. The US probe identifies only the lymph nodes, but no other structures
- C. A landmark used to localize station 4L is the intersection of the aorta and the esophagus
- D. A landmark used to localize station 4R is the superior vena cava

11. Mark the correct answer about rigid bronchoscopy (RB) and flexible bronchoscopy (FB)

- A. Both can be performed under conscious sedation
- B. RB is safer than FB in the management of critical airway narrowing
- C. FB offers an excellent support for oxygenation
- D. RB and FB have the same suction capability

12. What is correct statement regarding endobronchial stents

- A. They are indicated only in intrinsic airway obstruction
- B. Guidelines recommend that metallic stents should not be used in benign airway obstruction
- C. Granulation tissue formation is not a complication of stent placement
- D. All stents are radiopaque

13. After an uneventful left thoracentesis of 1000mL, in a patient with known malignant effusion, a CXR showed a left deep sulcus sign. Patient is asymptomatic. What would you do next (mark the best answer):

- A. Order a CT chest
- B. Admit patient to the hospital
- C. Place a chest tube immediately
- D. None of the above

14. 60 yo female smoker was found to have a large right mainstem endobronchial tumor by bronchoscopy. Twelve hours after EBBX of the tumor, she presents to ER with SOB and hypoxemia. CXR in ER is shown below. What would you do next? (mark the best answer)



- A. Flexible bronchoscopy with suctioning of secretions
- B. Aggressive pulmonary toileting
- C. CT scan of chest
- D. Flexible followed by rigid bronchoscopy with possible therapeutic techniques (e.g. Laser)

15. Bronchoscopy is indicated in all the following, except:

- A. Localization of hemoptysis
- B. Suspicious rejection in patients with lung transplant
- C. Localization of an aspirated foreign body
- D. Diagnosis of community acquired pneumonia