

SELF-ASSESSMENT - MODULE C: COPD

1. Name the 5 diseases classified as obstructive disease.
 - A. **CYSTIC FIBROSIS**
 - B. **CHRONIC BRONCHITIS**
 - C. **ASTHMA**
 - D. **BRONCHIECTASIS**
 - E. **EMPHYSEMA**

2. Which of the following will be seen in emphysema
 - A. **Decreased flowrates**
 - B. Decreased lung volumes (**RV, FRC, TLC ALL INCREASED**)
 - C. SVC smaller than FVC (**SVC > FVC**)
 - D. All the above

3. How will the PMI be affected in a patient with a barrel chest and emphysema?
DECREASED OR ABSENT

4. Why do obstructive disease patients purse lip breathe?
TO MOVE THE EQUAL PRESSURE POINT (EPP) MORE DISTALLY. THE EQUAL PRESSURE POINT IS THE POINT WHERE THE PRESSURE INSIDE THE AIRWAY EQUALS THE PRESSURE OUTSIDE THE AIRWAY. IF THE EPP IS PROXIMAL TO THE LARGE AIRWAYS, THERE IS INCREASED AIR TRAPPING. BY MOVING IT MORE PERIPHERALLY, THE AIRWAYS ARE SPLINTED OPEN AND BETTER VENTILATION CAN OCCUR.

5. What type of percussion note is heard during physical examination of the patient with COPD?
HYPERRESONANT OR HOLLOW

6. What would the chest x-ray look like in COPD?
 - **HYPERINFLATION OF THE LUNGS**
 - **HYPERLUCENT X-RAY**
 - **INCREASED RETROSTERNAL AIRSPACES**
 - **DEPRESSED DIAPHRAGM**
 - **SMALL HEART (LONG & NARROW)**
 - **DECREASED VASCULAR MARKINGS**
 - **BLEBS & BULLAE**

7. Describe the 5 grades of dyspnea.
 - A. **GRADE I – NORMAL (DYSPNEA THAT OCCURS AFTER STRENUOUS ACTIVITY)**
 - B. **GRADE II - DYSPNEA AFTER GOING UP HILLS OR STAIRS**
 - C. **GRADE III - DYSPNEA WALKING AT NORMAL SPEEDS**
 - D. **GRADE IV – DYSPNEA SLOWLY WALKING ON LEVEL GROUND FOR SHORT DISTANCES**
 - E. **GRADE V - DYSPNEA AT REST OR DOING ADL (SHAVING, DRESSING, MAKING BED)**

8. Should a complete PFT be ordered on a patient with an exacerbation of COPD?
YES **NO**
9. If a patient smoked 3 packs of cigarettes for 15 years, the pack years would be **45 PACK YEARS**.
10. What would the CBC most likely show in COPD?
POLYCYTHEMIA, INCREASED HEMATOCRIT, AND INCREASED WBC IN THE PRESENCE OF AN ACUTE INFECTION.
11. What type of oxygen delivery device should FIRST be used on COPD patients with CO₂ retention? **NASAL CANNULA @ 1-2 L/MIN, AIR ENTRAINMENT MASK (24- 26- 28%). PATIENTS IN ACUTE DISTRESS SHOULD BE TREATED WITH A HIGH-FLOW SYSTEM.**
12. Three tests may be done to test for the FRC, TLC, & RV. Which test is more accurate? **BODY PLETHYSMOGRAPHY**
13. What % of patients with COPD are CO₂ retainers? **10-20%**
14. During mechanical ventilation of COPD, name two common problems.
A. **WATCH FOR AIR TRAPPING**
B. **WATCH FOR PNEUMOTHORAX**
15. How would you treat the following ABG taken from a patient with severe obstructive lung disease on an FiO₂ of .40?
pH 7.20 PaCO₂ 79 torr PaO₂ 88 torr HCO₃⁻ 36 mEq/L
DECREASE FiO₂ AND REPEAT ABGs
16. How would you treat the following ABG taken from a patient with severe COPD on an FiO₂ of .40?
pH 7.20 PaCO₂ 85 torr PaO₂ 37 torr HCO₃⁻ 36 mEq/L
INTUBATE AND MECHANICALLY VENTILATE
17. Panlobular emphysema is often caused by a deficiency of an enzyme called **ALPHA ONE PROTEASE INHIBITOR - α₁PI.**
18. This type (Panlobular) of emphysema most often affects the
A. Upper lobes of the lung
B. **Lower lobes of the lung**
C. Middle lobes of the lung
19. Patients with COPD and Cor Pulmonale will most likely have which of the following:
A. ↑ CVP
B. ↑ PAP
C. ↑ Mean PAP
D. ↑ Pulmonary Vascular Resistance (PVR)
E. **All the above**

20. Draw the ventilatory pattern for a patient with COPD.
TACHYPNEA WITH LONG EXPIRATION