Multiple choice question sheet – Pulmonary embolism and pulmonary edema – Correct answers

Pulmonary embolism

What is pulmonary embolism?

1. A blood clot obstructing a pulmonary artery
2. A blood clot obstructing the aorta
3. A blood clot in the deep veins of the extremities or pelvis
4. Right sided heart failure

What is the most frequent cause of pulmonary embolism?

1. Congestive heart failure
2. Hemorrhagic fever
3. Deep vein thrombosis
4. Pneumonia

What are the symptoms of DVT?

1. Swelling of the affected leg
2. Cyanosis or redness of the skin above the DVT
3. Warmness of the skin above the DVT
4. Pain in the affected leg
5. All of the above

Which of the following symptoms are not characteristic for pulmonary embolism:

1. Hemoptysis
2. Cyanosis
3. Hemorrhagic diathesis
4. Painful respiration
5. All of the above

A 67 year old patient with dyspnea comes in to the ED. The patient has a former history of bladder cancer, he has swollen left leg, which is very painful, and he has a heart rate of 110 bpm.

What is the patient’s risk of having a pulmonary embolism?

1. Low
2. Moderate (the patient gets a score of 5,5 points on the Well’s Score)
3. High

What is the treatment of pulmonary embolism?

1. Morphine, oxygen, nitroglycerine and aspirin
2. Morphine, oxygen, nitroglycerine, thrombolysis or embolectomy  
3. Morphine, oxygen, aspirin and embolectomy  
4. Oxygen, morphine, low molecular weight heparin, thrombolysis if deemed necessary, worst case: embolectomy

**Pulmonary edema**

What is pulmonary edema?

1. Excessive leakage of fluid into the interstitial compartment in the lungs  
2. Excessive leakage of fluid into the pleural cavity  
3. Excessive leakage of fluid into the pericardial cavity  
4. Edema of the larynx

What is the most frequent causes of cardiogenic pulmonary edema?

1. ARDS  
2. Inhalation of toxic gases  
3. Overhydration  
4. Congestive heart failure

Which of the following is **not** a symptom of pulmonary edema?

1. Noisy respiration  
2. Coarse crackles and rales on auscultation  
3. Cyanosis  
4. DVT

What blood tests are relevant?

1. Urea nitrogen  
2. **CK-MB, Troponin T and I.**  
3. Glucose and ketone bodies  
4. Transaminases

What is the initial treatment of pulmonary edema?

1. Morphine, oxygen, nitroglycerine, aspirin  
2. **Morphine, oxygen, nitroglycerine, furosemide**  
3. Morphine, oxygen, nitroglycerine, thrombolysis,  
4. Morphine, oxygen, low molecular weight heparin, thrombolysis if deemed necessary, worst case: embolectomy
What is important to monitor after administering the initial treatment?

1. Skin color
2. Breath sounds
3. Diuresis
4. Blood pressure
5. **All of the above**

If the blood pressure is high after the initial treatment, you should administer:

1. Inotropics
2. Saline water
3. **Nitroglycerine i.v.**
4. Beta-blockers