10/20/2006 **Write-Up to be Graded** **Sarah Broom**

Chief Complaint:

Shortness of breath.

History of the Present Illness:

Mr.█ is a previously healthy 56-year-old gentleman who presents with a four day history of shortness of breath, hemoptysis, and right-sided chest pain. He works as a truck driver, and the symptoms began four days prior to admission, while he was in Jackson, MS. He drove from Jackson to Abilene, TX, the day after the symptoms began, where worsening of his dyspnea and pain prompted him to go to the emergency room. There, he was diagnosed with pneumonia and placed on Levaquin 500 mg daily and Benzonatate 200 mg TID, which he has been taking for two days with only slight improvement. He then drove from Abilene back to Greensboro, where he resides, and continued to experience shortness of breath, right sided chest pain, and hemoptysis. He presented to an urgent care office in town today, and was subsequently transferred to the Moses Cone ER due to the provider's suspicion of PE.

The right-sided pain is located midway down his ribcage, below the axilla. This pain is sharp, about 7/10 in severity, and worsens with movement and cough. Pressing on the chest does not recreate the pain. He feels that the pain has improved somewhat over the past two days. The hemoptysis has been unchanged since it began; there is not frank blood, but his sputum has been consistently blood-tinged. The blood seems redder at night. The dyspnea has been severe, and it is difficult for him to walk more than across a room. He states that he feels as though there is a "rattling" in his chest. At baseline, he experiences no dyspnea on exertion and has no history of COPD or other respiratory problem. He is a smoker, smoking a little less than a pack a day for thirty-five years. Past history is notable for the fact that he experienced transient left lower leg swelling – from below the knee down – and pain several weeks ago during a cross-country haul. He also notes a four day history of decreased appetite, poor sleep, and subjective fever and chills, with a measured fever of 103 in the hospital in Abilene. He had a bout of pneumonia about two months ago, but has been healthy for the most part and denies any chronic medical conditions. Currently he is fairly comfortable, with morphine helping with the pain. He has no history of a clotting disorder, no cardiac history, and denies any chest trauma or aspiration. He has had no sick contacts.

Past Medical History:

1. Hernia repair
2. Bilateral thumb surgeries, secondary to two separate injuries sustained while working with machinery

Medications:

No regular medications, over-the-counter medications, or supplements. Has taken two days of the medications prescribed by the ER in Abilene: Levaquin 500 mg daily and Benzonatate 200 mg TID.

Allergies:

No known drug allergies. Dislikes codeine for the "way it makes me feel."

Review of Systems:

Constitutional: Denies changes in weight, fatigue, night-sweats.
HEENT: No changes in vision, nasal discharge, headache.
CV: No palpitations, left-sided chest pain/pressure, edema.
Resp: See HPI
GI: No nausea, vomiting, diarrhea, constipation.
GU: No dysuria, increased frequency.
Neuro: No weakness, confusion, numbness, dizziness.
MSK: No weakness, arthralgias, myalgias.
Heme: No easy bruising, easy bleeding.
Skin: No new lesions or rashes.
Endocrine: No polydipsia, polyuria, heat/cold sensitivity.

Social History:

Mr. ██ is divorced, lives in ██████████, and has been a truck driver for many years. He lives with his brother and his brother's wife. He has several children, including a daughter who also lives in the area. His family is very supportive and they get along well. As per HPI, he smokes a little less than a pack per day and has for thirty-five years. He does not drink alcohol or use other drugs. He tries to be physically active, and his favorite type of exercise is line dancing. He has "excellent" insurance through his employer.

Family History:

No family history of lung disease or clotting disorders.
Mother died at 92 of "old age."
Father died in a farming accident, no chronic health problems.
Sister had arthritis, some kind of cancer, and died of an MI at 64.
Brother had rheumatic heart disease and died of an MI at 56.
Other five siblings and children are healthy.

Physical Examination:

Vitals:

Temp:99.1 F Pulse: 88 Resp. Rate: 24 BP: 114/78
O2 sats: 90% on room air → 95% on 4L oxygen

General:

Alert, calm, well-developed male. Height/weight proportionate. No acute distress.

HEENT:

Pupils equal, round, reactive to light and accommodation. Extra-ocular movements intact. Moist mucous membranes in oropharynx. Some darkened teeth; possible caries. Small, reddened, raised area on left tonsilar pillar.

Neck:

Supple, without lymphadenopathy or thyromegaly. No carotid bruits.

Lymph:

No axillary, cervical, supraclavicular, pre-auricular, submental, or occipital lymphadenopathy,

Cardiovascular:

Regular rate and rhythm, with normal S1 and S2. No murmurs, rubs, or gallops. No JVD. 2+ pulses bilaterally – dorsalis pedis and radial.

Lungs:

Diffuse, bilateral crackles throughout lung fields. No wheezes. No accessory muscle use or cyanosis. Rhonchi from right lung base extending midway up lung field, very loud. No egophony. No tenderness to palpation.

Abdomen:

Normoactive bowel sounds. Soft, flat, non-tender, and non-distended. No hepatosplenomegaly; liver span approximately 10 cm.

Skin:

Warm, dry, well-perfused. No rashes or other lesions. Some scattered freckles across arms and back. Tanned neck and forearms.

Extremities:

2+ pulses in upper and lower extremities. No lower extremity pain or edema; legs are symmetric in appearance.

Rectal:

Deferred.

Neuro:

Alert and oriented to person, place, and time. Able to communicate well. Cranial nerves 2-12 grossly intact. 5/5 strength in all extremities bilaterally. Sensation intact in all extremities. Normal gait. 1+ DTR's in biceps, triceps, supinator, knee, ankle. No clonus.

Psych:

Appropriate affect.

Admission labs:

WBC: 9.4, Hgb: 11.5, Hct: 34.0, Platelets: 223, MCV: 89.5, ANC: 1.7

Sodium:134, Potassium: 3.6, Chloride: 101, Bicarb: 25.1, BUN: 8, Creatinine: 1.0, Glucose: 106

Imaging & other studies:

EKG: Normal sinus rhythm, with rate at 90. Normal intervals and axis. No hypertrophy, no evidence of ischemia. No evidence of right heart strain.

CT: Right basilar atelectasis/infiltrate identified, with small bilateral pleural effusions; bilateral pulmonary emboli seen. Also noted are a large hiatal hernia, probable pericardial cyst, and gallstones.

Problem list:

1. Pulmonary embolus
2. Possible pneumonia
3. Anemia

4. Smoking cessation

Assessment & Plan:
Previously healthy 56 year old man presenting with shortness of breath, hemoptysis, and right-sided chest pain, with CT images demonstrating pulmonary emboli and infiltrates.

1. Shortness of breath: The symptoms of dyspnea, hemoptysis, and the right-sided chest pain could all be explained by a pulmonary embolus, and the CT shows evidence that confirms this diagnosis. Management should be to supply supplemental oxygen to maintain adequate oxygen saturation, to control Mr. █'s chest pain, and to anticoagulate him. Anticoagulation with low molecular weight heparin and Coumadin could be started simultaneously, with both therapies should overlapping for at least five days; we will seek to obtain an INR between 2 and 3. The patient is currently hemodynamically stable, without evidence of right heart strain, so thrombolysis does not seem indicated at this time.
   With his history of long drives back and forth to California, Mr. █ is at risk for venous stasis, which is a major source of DVT's; he even presents a history of lower leg pain and swelling. Testing for various causes of hypercoagulability would also be reasonable: these include deficiencies of proteins C and S, antithrombin III, lupus anticoagulant or anticardiolipin antibodies, and factor V mutations, prothrombin mutation, lipoprotein a, and hyperhomocystinemia. Another important factor to consider would be malignancy, especially as Mr. █ is a long-time smoker. Screening for lung, colon, and prostate cancer would be appropriate.

2. Possible pneumonia: Mr. █ has a history of being febrile, and was diagnosed with pneumonia in Abilene (obtaining these records will be helpful), but does not currently have an elevated white count. The CT demonstrates an infiltrate, possibly consistent with pneumonia. Sputum cultures and blood cultures would be reasonable to obtain, though since he has been taking an antibiotic for presumed community acquired pneumonia, this may be low-yield. His vitals should be monitored regularly. It is possible that all pulmonary symptoms stem from the pulmonary embolus, but it would be reasonable to continue the antibiotic therapy that he has already started in order to cover the possibility of an infectious component.

3. Anemia: Admission labs show hemoglobin at 11.5, with MCV of 89.5, so this anemia is normocytic. The patient denies any history of anemia when questioned, and was not dizzy, pale, or fatigued. He has had no history of acute blood loss other than the hemoptysis, which tends to be blood-tinged sputum rather than frank blood, and is not large in quantity. In order to work this up, we could obtain a reticulocyte level, a blood smear, TSH level, and test for occult blood in the stool. He has no history of renal problems, and his creatinine is 1.0. He has never had a colonoscopy, so this should be certainly pursued in the outpatient setting.

4. Smoking cessation: Mr. expressed interest in smoking cessation, and acknowledges that his respiratory symptoms make him feel less interested in smoking. I counseled him that this would be an excellent time to quit, as he will be in a structured environment without easy access to cigarettes. We can support his cessation attempt by providing a nicotine patch or other supplement as needed for cravings, and by requesting a smoking cessation consult. He has a great deal of family support from his brother and daughter in this pursuit.