

A 65 yo white female presented with a chief of complaint of  
Severe cough with thick yellow sputum production x 2 days.

Present Illness:

Ms. Johnson suffered a stroke 1 year prior to admission. However, she had been feeling well until 1 week prior to admission (PTA) when she noticed rhinitis and a sore throat associated with a low-grade fever. She started improve until 3 days PTA when she noted the onset of a productive cough with thick yellow sputum, higher fever and a feeling of exhaustion. She also lost her appetite. She felt progressively worse, and began experiencing shortness of breath, right sided sharp chest pain made worse by inspiration.

PE: Temp 39°C, P 120, RR 30, BP: 90/70

General: Ill appearing, in some respiratory distress with an expression of concern and fear.

HENT: mild erythema of the posterior pharynx

Neck: supple

Lungs: rales rt. mid posterior lung field, e to a changes in the same region

Heart: nl S1 and S2, no murmur, rubs or gallops

Abdomen: nontender, no organomegally

Extremities: no edema, weakness of her rt arm and leg (old)

WBC 15,000 (86% PMN, 10 Bands)

CXR: dense infiltrate strictly involving the right-lower lobe

1. What factors may have predisposed this woman to develop pneumonia (2 points)
  - Stroke leading to difficulty swallowing and possible aspiration,
  - Viral URI resulting in increased fluid pooling in alveoli,
  - Elderly decreased immune response
2. Do you think this patient needs to be hospitalized. Explain why or why not (1 point)
  - Yes, over 50, elevated pulse, low blood pressure, high respiratory rate
3. What is the most likely etiology of her pneumonia. Why did you pick your diagnosis? (2 points) *S. pneumoniae*, acute onset, productive cough, chest pain, lobar infiltrate, most common cause of bacterial pneumonia  
Note: Aspiration pneumonia also possible