<table>
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<th>Podcast Series</th>
<th>Reynolds Geriatrics Series • USMLE Step 2 CK Prep</th>
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<tr>
<td>Episode Title &amp; Question Number</td>
<td>“Why would Mr. Smith have recurrent pneumonia?” based on Question 33 of the 2010 USMLE sample exam</td>
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<td>Personnel</td>
<td>Jeremy Jones and Jessica Baima</td>
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<td>December 10, 2010</td>
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| Episode Description | Question 33, page 34  
http://download.usmle.org/2010Step2CK.pdf |

A 70-year-old man comes to the physician because of fever, productive cough, and pleuritic chest pain for 1 day. Over the past 2 years, he has had two similar episodes. He also has had persistent pain in the thoracic spine for 1 month. His temperature is 39.2°C (102.6°F), pulse is 94/min, respirations are 22/min, and blood pressure is 110/60 mm Hg. There is dullness to percussion and decreased breath sounds over the right base. Examination shows tenderness of the midthoracic spine. Laboratory studies show:

- Hematocrit 34%
- Leukocyte count 15,000/mm³
- Serum calcium 10.9 mg/dL
- Segmented neutrophils 81%
- Bands 4%
- Lymphocytes 15%

X-rays of the chest show consolidation of the right lower lobe, lytic lesions at T8 and T10, and diffuse osteopenia. Which of the following is the most likely diagnosis of this patient's back condition?

(A) HIV infection
(B) Multiple myeloma
(C) Prostate cancer
(D) Staphylococcal osteomyelitis
(E) Tuberculosis osteomyelitis
## Learning Objectives

*The listener should be able to:*

- Recognize clinical presentation of pneumonia
- Understand common presentations of Multiple Myeloma
- Recognize Red Flags for potential diagnosis of Multiple Myeloma in a patient with back pain.
- Differentiate spinal x-ray findings of Multiple Myeloma, Prostate Cancer, and osteomyelitis

## Key Teaching Points

1. Multiple myeloma is the most common primary cancer of the bones in adults. Median age at diagnosis is 62 years.

2. 30% diagnosed incidentally. 2/3 complain of bone pain, frequently in the back, long bones, skull, and pelvis. Patients may also have hyperviscosity, hypercalcemia, and unresolving infections.

3. Multiple myeloma skeletal lesions are observed on simple radiographs in 80 percent of cases. The most common finding is diffuse osteopenia with possible lytic lesions. The radiographic findings often relate to vertebral compression fractures.

## Comments

## References


