

Just because it's shoulder pain doesn't mean it is benign.

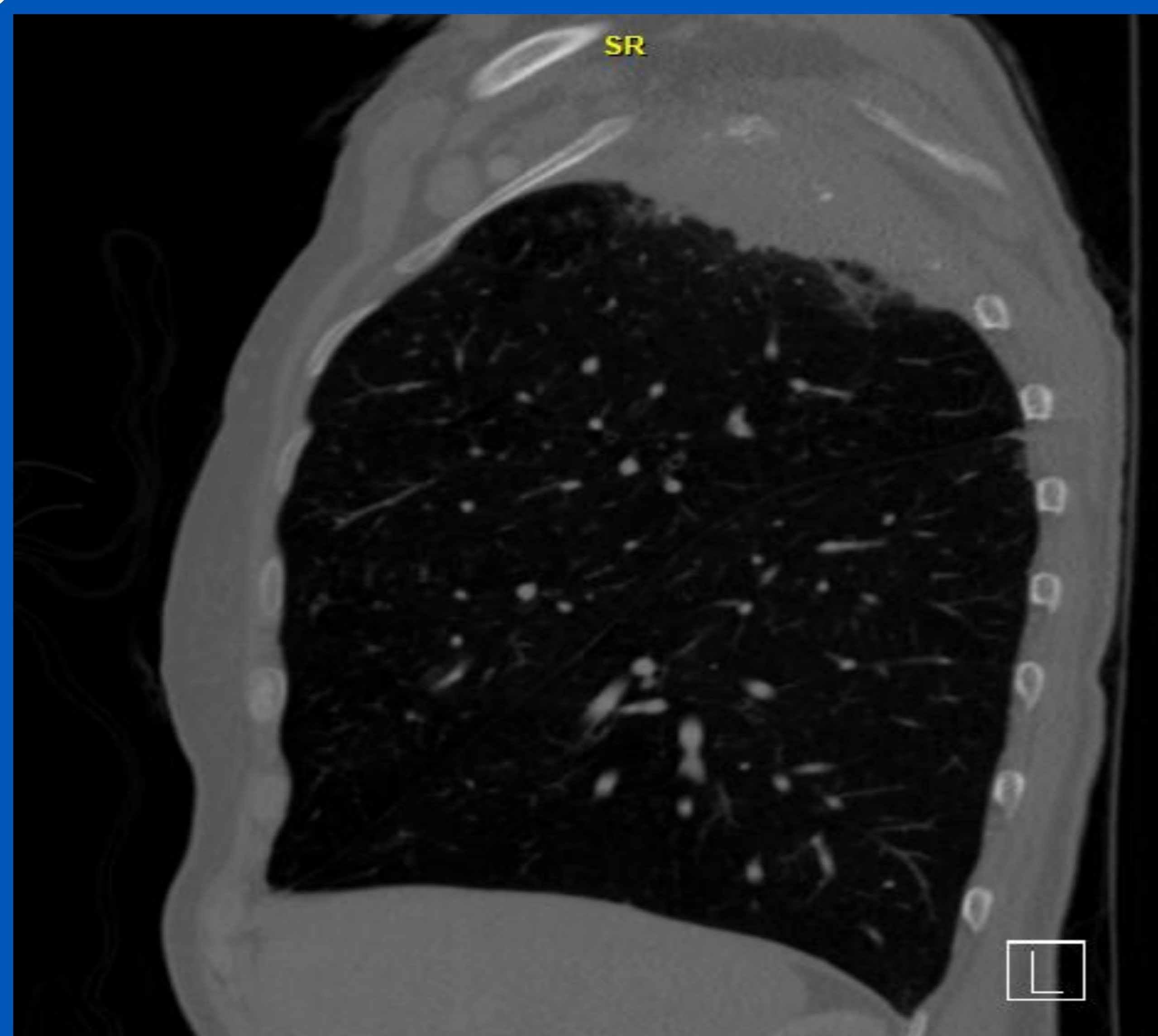


Figure 1



Figure 2

Figure 1 and 2: Large right upper lobe mass extending the apex highly concerning for a primary lung malignancy

Atypical Presentation Of A Lung Mass Presenting As Shoulder Pain

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CASE PRESENTATION

HPI: A 63-year-old woman with a ten-month history of worsening right-sided periscapular pain radiating to the right neck, axilla, and anterior chest wall.

Numbness in the right axilla and upper extremity.

Pain severity remained consistently high, 10 out of 10.

Medical history: 50-pack-year smoking history.

Associated symptoms: unintentional weight loss of 10 pounds in the past year; denied any cough or shortness of breath.

Other evaluations: Prior negative orthopedic workup.

Pain modalities tried: Thoracic medial branch blocks followed by trigger point injections to the scapular region, acupuncture, chiropractic visits, neuropathic pain medications, anti-inflammatories and opioids all provided minimal relief, prompting reassessment at our facility.

Prior Imaging: CXR 4 months prior demonstrated biapical scarring R > L with no interval change and no acute cardiopulmonary disease. MRI of the thorax and cervical region 6 months prior noted mild multilevel thoracic spondylosis and mild to moderate neuroforaminal stenosis at C4 and C5 but otherwise no acute disease or severe central canal narrowing.

Clinical exam findings: Positive tenderness to palpation across her right chest wall and right periscapular region. Absent sensation from the T2-4 dermatomes on the right

Imaging: At the time of presentation to our clinic, a contrast-enhanced chest CT scan was immediately obtained, revealing a large right upper lobe mass extending the apex highly concerning for a primary lung malignancy. Destruction of the right 2nd-4th ribs with invasion of the T2 and T3 posterior elements and obliteration of the T2-T4 neuroforamen.

The patient was promptly referred to an oncology specialist for further management.

DISCUSSION

Initial diagnostic focus on benign causes delayed the discovery of malignancy. The persistent pain, in conjunction with the patient's medical history, prompted a diagnostic shift and eventually revealed the unfortunate diagnosis of a lung mass. While shoulder pain can arise from multiple sources, including myofascial tension or radiculopathy, our case highlights the need for a comprehensive diagnostic approach for treatment-resistant pain.

Furthermore, our discussion extends to the realm of right upper lobe masses, such as superior sulcus tumors, known for their ability to mimic musculoskeletal pain. Shoulder pain is the most common symptom of these tumors with patient's frequently receiving treatment for presumed cervical osteoarthritis or shoulder bursitis further leading to a delay of their diagnosis. Superior sulcus tumors or Pancoast tumors, while somewhat rare, are notorious for their atypical presentations and can frequently masquerade as benign conditions. Since they are apically located, pulmonary symptoms do not develop until later, as the tumor begins to invade more into the lungs. In our patient's case, the constellation of symptoms—persistent pain, treatment resistance, weight loss, and smoking history invited considerations beyond the usual focus of musculoskeletal issues.

CONCLUSION

- This case not only emphasizes the intricate diagnostic challenges intertwined with shoulder pain but also accentuates the importance of a holistic evaluation to consider alternative diagnoses.
- By accepting the idea that seemingly benign symptoms may indicate deeper, more alarming pathologies, healthcare practitioners can strive for timelier, more accurate diagnoses and ultimately enhance patient outcomes.

REFERENCES

1. Arcasoy, S., Schild, D., & Leal, T. (2023). Superior pulmonary sulcus (Pancoast) tumors. *UpToDate*. Retrieved August 8, 2023, from [Superior pulmonary sulcus \(Pancoast\) tumors - UpToDate](#)
2. Villgran, V. D., Chakraborty, R. K., & Cherian, S. V. (2023). Pancoast Syndrome. In *StatPearls*. StatPearls Publishing.