

APICAL CANCER/PANCOAST TUMOR; A Case Report

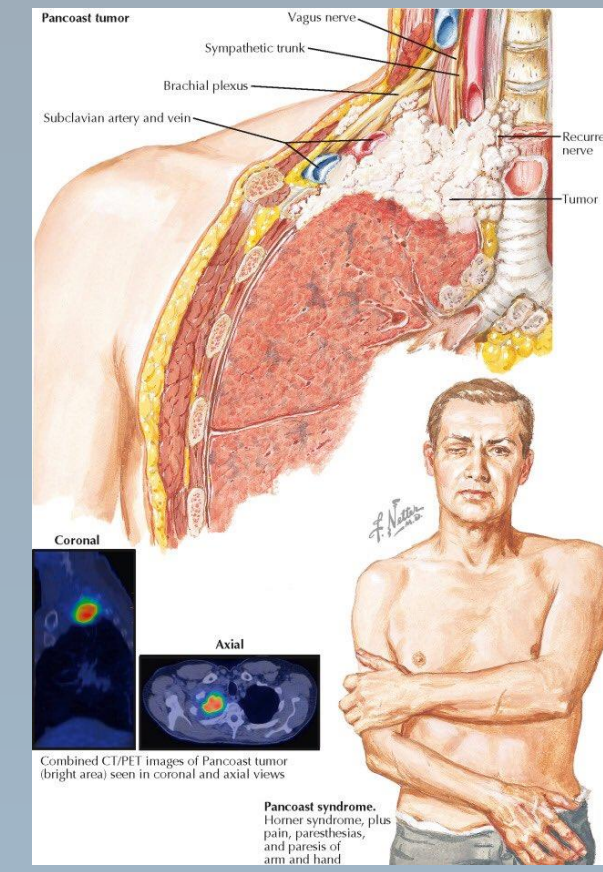
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INTRODUCTION

Lung cancer is the most common cause of cancer-related death in the United States and worldwide. Pancoast Tumor is a rare condition, accounting for about 3-5% of all lung cancers. It is a tumor in the apical region of lungs with potential invasion into the nearby structures, such as vessels, nerves and vertebral bodies. The majority of Pancoast tumors are NSCLC, which includes squamous cell carcinoma and adenocarcinoma. The most common associated symptom is ipsilateral shoulder pain.



CASE REPORT

69-year-old male with a history of COPD, lung nodule, and 50 pack year smoking history, ETOH abuse disorder presented to ED with right-sided chest pain and shoulder pain. He was admitted for hyponatremia. Labs were concerning SIADH, but hyponatremia responded to IV fluid. The hyponatremia was believed to be secondary to malignancy-associated SIADH vs beer potomania or a combinational effect of SIADH and beer potomania.

Lab	Na	Serum Osm	Urine Osm	Urine Na
Value	121	266	343	33

Chest Xray was significant for right apical pleural thickening and concerning for right apical mass (fig 1) and sclerotic lesion of right shoulder(fig 2). CTA Chest (fig3) showed a 5.3cm spiculated lesion of right apical lung with a lytic lesion of posterior second rib. Patient was discharged after hyponatremia significantly improved. Outpatient bronchoscopy resulted in giant cells with abundant fungal material that was treated with Antifungal. MRI of brain, cervical and thoracic showed 7cm right apical mass encasing right 1-3 posterior ribs with extension to the right T-1-T2 vertebral bodies, osseous metastasis to C5-C7 vertebral bodies contributing to severe right C5-C6 foraminal narrowing. IR directed lung biopsy confirmed squamous cell carcinoma. PET CT later showed a centrally necrotic pedicle right lung mass, associated osseous destruction of his 2nd and 3rd ribs and vertebral bodies of T1 and T2, and multiple nodules and clusters of micronodules throughout right upper and lower lobes as well as posterior left lower lobe. With all these information put together, pt was clinically staged as CT4CN2CM1C

IMAGING

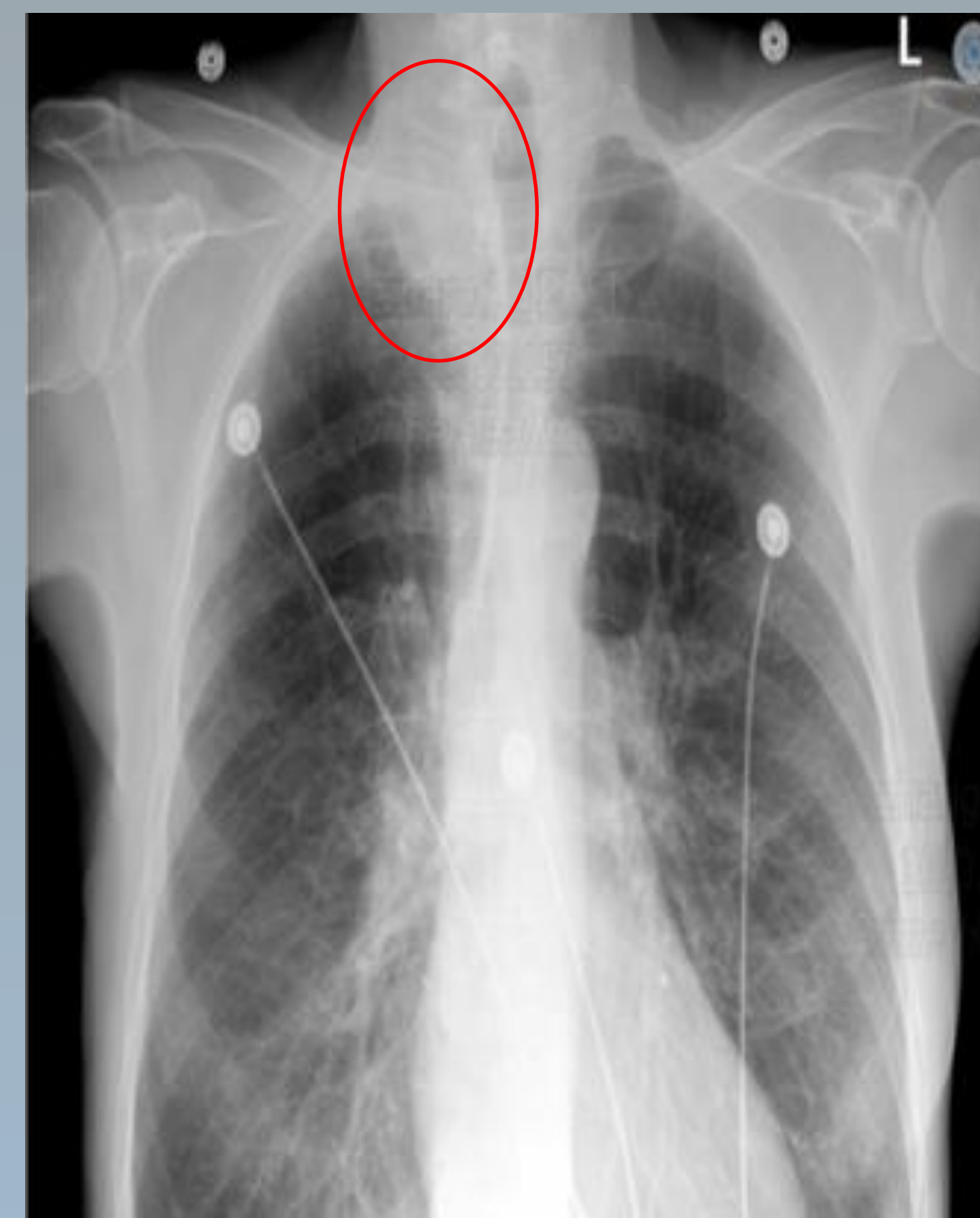


Figure 1 Chest Xray

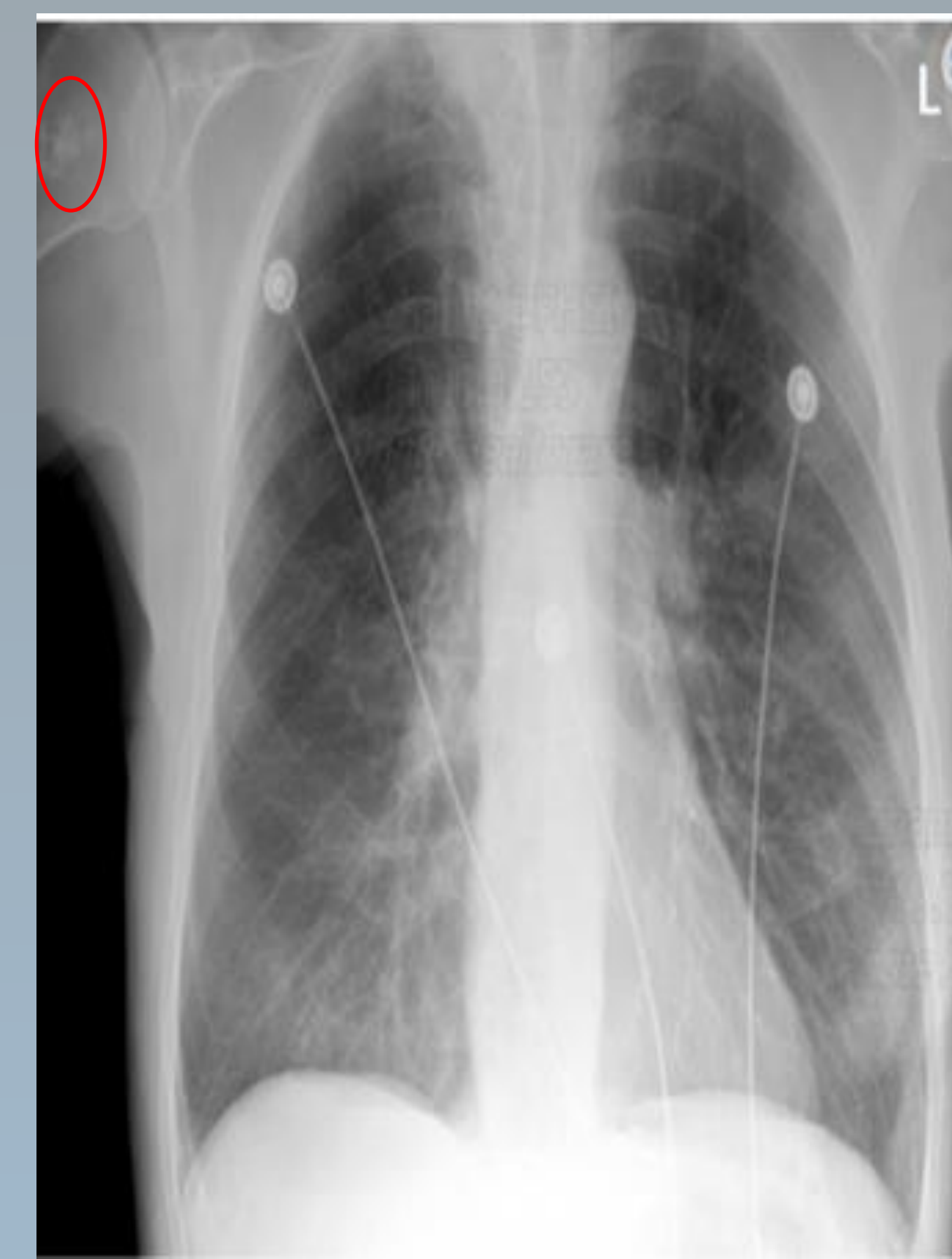


Figure 2 Chest Xray

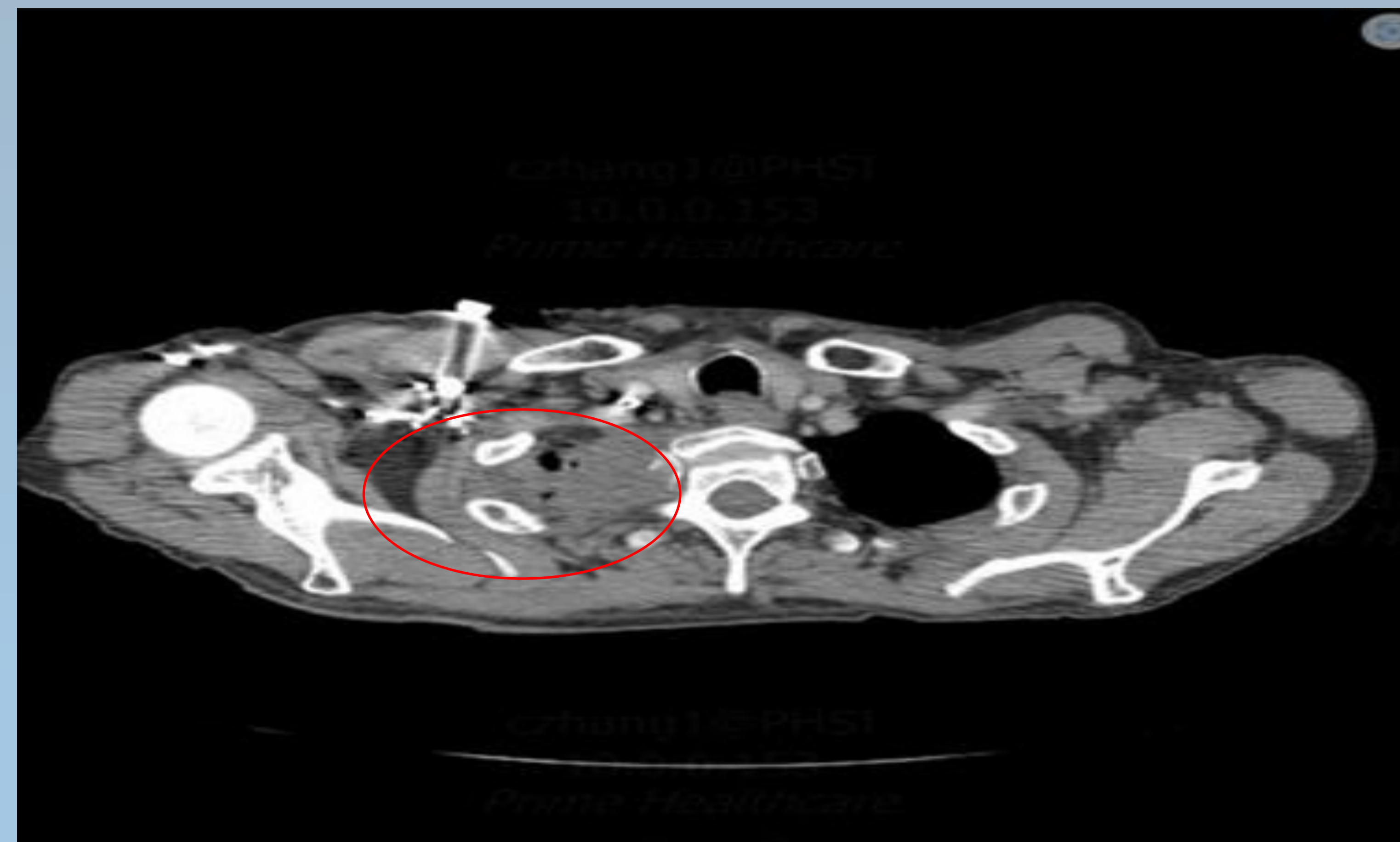


Figure 3 CTA Chest

DISCUSSION

There are many interesting facts in this case that are worth paying special attention to.

- SIADH is known to be highly associated with lung cancers. However, in case of Pancoast tumor, especially NSCLC, SIADH does happen but is very rare as compared to SCLC.
- The symptoms of Pancoast tumor are caused by invasion of Pancoast tumor into the nearby structures. Specific presentation depends on the extensiveness of the tumor's invasion. As present in our pt, ipsilateral shoulder pain is the most common associated symptom.
- Low Dose Chest CT is a very important modality used in screening for cancers in chronic smokers. Our patient had a right apical 3mm lung nodule found in 2022 on Low Dose CT but failed to follow up for the nodule. This case emphasizes the importance of annual Low Dose CT. The 5-year survival rate for stage 1 lung cancer is 68-92% while stage 4 is 0-10%.

REFERENCES

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