A Nutty Case of Post-Obstructive Pneumonia

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Introduction

- Foreign body aspiration is a less common presentation of post-obstructive pneumonia in adults
- Often unrecognized and misdiagnosed
- Here we present a case of post-obstructive pneumonia presumed to be secondary to a lung mass, later discovered to be attributed to foreign body aspiration

Case Description

- 66-year-old male
- Presenting symptoms: febrile, hypotensive, and in respiratory distress requiring supplemental oxygen
- Reported two weeks of productive cough with purulent, foul-smelling sputum
- Labs:
 - WBC- 19.9 K/uL
 - Cr- 1.7 mg/dL (baseline 1.1)
- Imaging:
 - Mass on CT (Figure 1), with occlusion of the bronchus and collapse of the left lower lobe, concerning for malignancy

Hospital Course

- Sepsis treatment initiated with piperacillin/tazobactam for superimposed pneumonia
- Bronchoscopy:
- Atelectasis, purulence and granulation tissue noted
- Discovery of a "yellow/golden lesion vs foreign body" lodged within the left lower lobe of the lung
- Subsequently removed and identified as a pistachio nut (Figure 2)
- Patient could not recall inciting event of aspiration, last known consumption of pistachios noted to be 5 months prior to admission
- Antibiotics narrowed to ceftriaxone
- Discharged with Pulmonology follow-up and repeat CT imaging in 3-6 months to assess for resolution of residual inflammation.

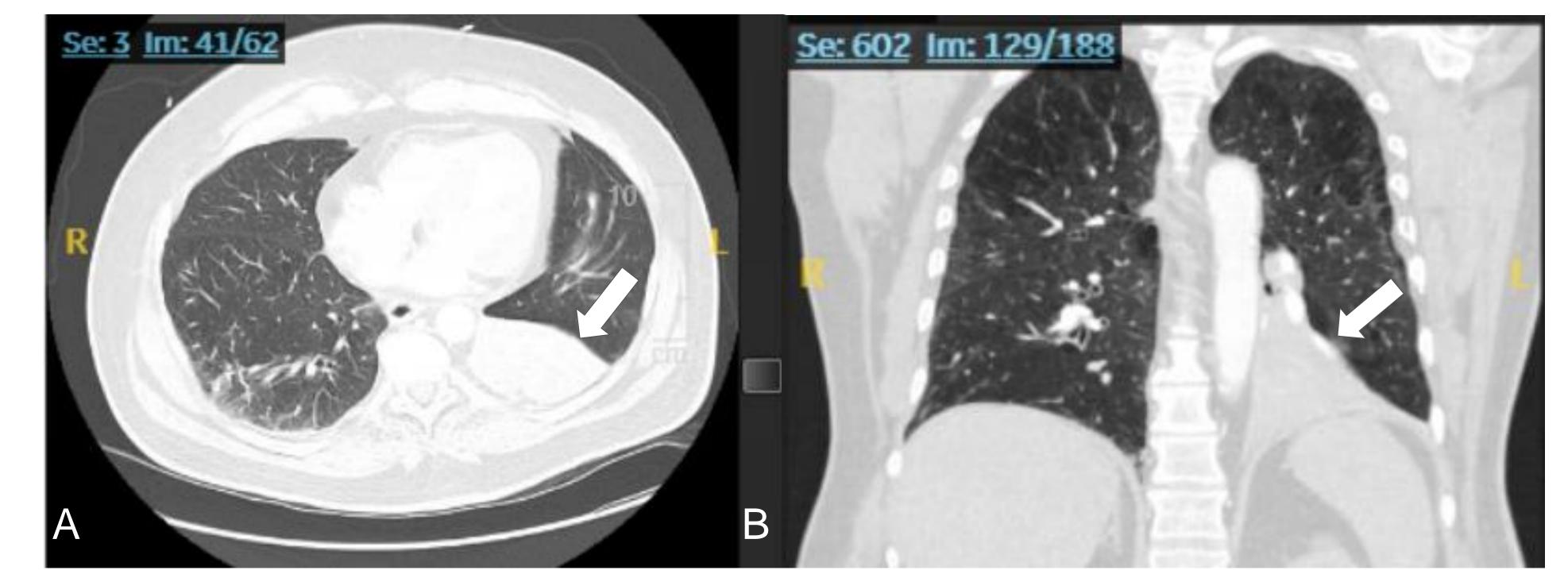


Figure 1: Transverse (A) and coronal (B) views of CT PE with contrast, showing occlusion of the left lower lobe bronchus with collapse of the left lower lobe. The radiologist interpretation noted that the soft tissue findings could be concerning for an underlying mass or adenopathy, raising concern for malignancy.

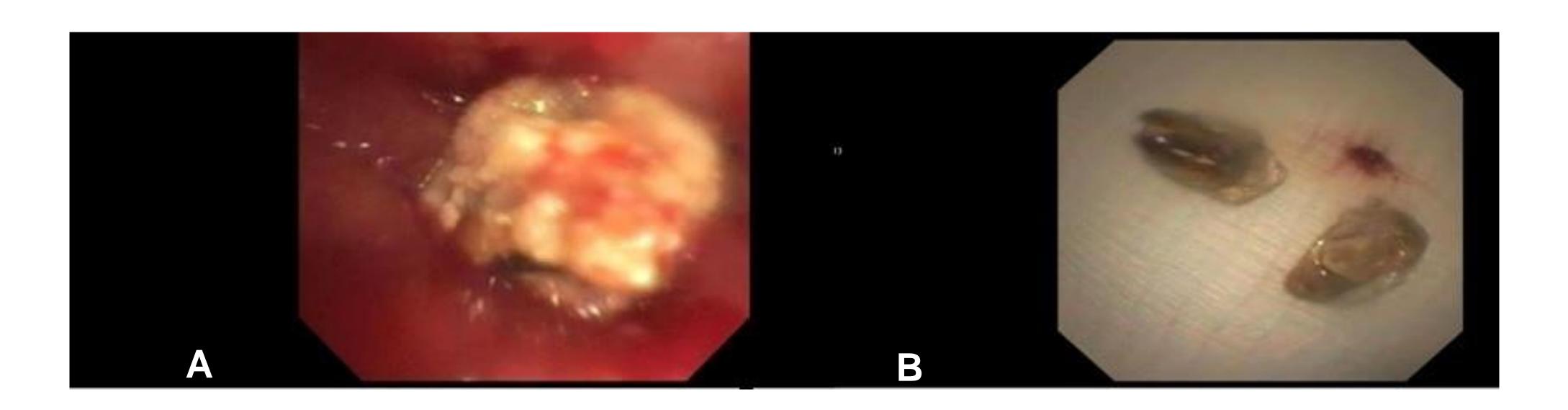


Figure 2: Foreign body as visualized during bronchoscopy with associated granulation tissue after obstructing pus and secretions were suctioned out of the left lower lobe (A). Foreign body status post removal (B).

Conclusion

- Foreign body aspiration is an under-recognized cause of post-obstructive pneumonia in adults
- Large majority of cases are attributed to malignancy
- CT imaging showing a non-specific mass may anchor clinicians to the presumed diagnosis of malignancy
- The lack of recognition or reporting of the inciting event by the patients themselves further complicates clinical presentation and diagnosis
- Delay in diagnosis and resolution of offending obstruction can lead to complex presentations such as severe sepsis as seen in our patient



References