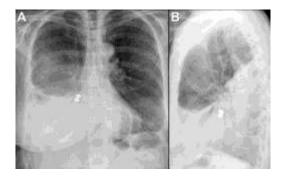
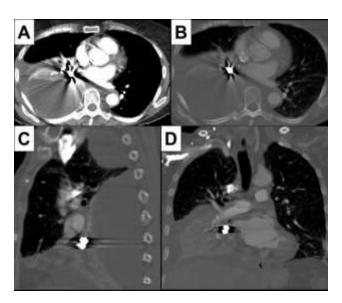
## SOUTHWEST JOURNAL of PULMONARY & CRITICAL CARE

Journal of the Arizona, New Mexico, Colorado and California Thoracic Societies <a href="https://www.swjpcc.com">www.swjpcc.com</a>

## December 2021 Medical Image of the Month: Aspirated Dental Implant



**Figure 1.** Frontal and lateral chest radiography shows right middle and lower lobe consolidation and a large right pleural effusion, suggesting pneumonia and parapneumonic effusion, but also shows a metallic focus in the right lower lobe. Click here to view Figure 1 enlarged in a new window.



**Figure 2.** Axial (A and B), sagittal (C) and coronal (D) contrast-enhanced chest CT displayed in soft tissue (A) and bone (B-D) windows shows right lower lobe consolidation and loculated pleural effusion. A metallic focus closely related to the right lower lobe bronchus is present. Click here to view Figure 2 enlarged in a new window



**Figure 3.** Bronchoscopic images performed during retrieval of the right lower lobe foreign body shows a metallic object lodged within the right lower lobe bronchus. The object was retrieved using a forceps and found to represent a dental implant, evidently aspirated during the patient's prolonged dental procedure. Click here to view Figure 3 enlarged in a new window.

A 76-year-old woman with a past medical history significant for left-sided breast cancer status post lumpectomy recently underwent an extensive dental procedure about 1 month prior to presentation. The dental procedure was prolonged, and the patient reported falling asleep during the procedure several times. She presented with fatigue, right pleuritic chest pain, low-grade fevers, and drenching sweats. She underwent chest radiography at an outside institution which disclosed pneumonia, for which she was treated with cefdinir and doxycycline without improvement. Thoracostomy tube drainage of the pleural effusion was performed and showed empyema. Imaging showed an airway foreign body which was retrieved bronchoscopically. The patient made an uneventful recovery.

Aspiration during dental procedures is rare but reported (1). Dental items have been reported as the second most commonly ingested/aspirated foreign objects in adults. If the airway is not compromised, assessment for any lost or missing instrument and its component should be done promptly with a high suspicion of mishap. Fortunately, many

dental appliances and instruments are often, but not always, radiopaque and may be detected by chest radiography. Many can be removed by bronchoscopy, as in this case.

Prasad M. Panse MD¹, Sreeja Biswas Roy MD², Robert W. Viggiano MD²
Departments of Radiology¹ and Pulmonary Medicine²
Mayo Clinic Arizona
Scottsdale, AZ USA

## Reference

 Yadav RK, Yadav HK, Chandra A, Yadav S, Verma P, Shakya VK.
 Accidental aspiration/ingestion of foreign bodies in dentistry: A clinical and legal perspective. Natl J Maxillofac Surg. 2015; 6(2):144-1451. [CrossRef] [PubMed]