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Clinical Image

Transvascular Needle Aspiration Guide for Ultrasound Bronchoscopy by Esophageal Approach (EUS-B-TVNA), Successful Diagnostic Approach

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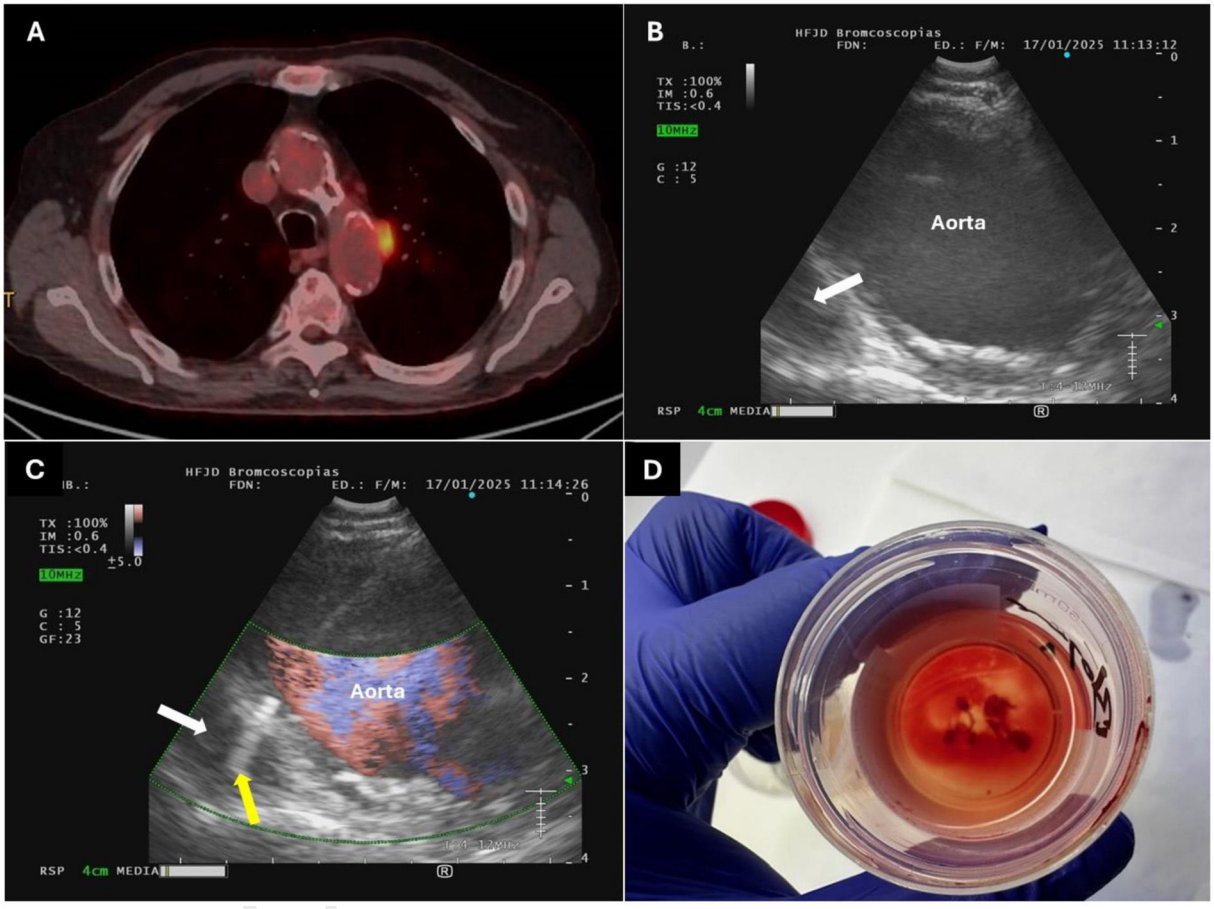

Fig. 1. (A) 18FDG PET-CT, hypermetabolic para-aortic adenopathy. (B) EUS-B, transesophageal approach, aorta and para-aortic adenopathy (white arrow). (C) EUS-B-TVNA through aortic artery shown with color Doppler, 21G needle (yellow arrow), para-aortic adenopathy (white arrow). (D) Cell blocks obtained.

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An 80-year-old male, ex-smoker of 50 packs/year, with no relevant pathological history, presented with dry cough and constitutional syndrome. Chest CT scan revealed a suspect pulmonary nodule of 10 mm in the left upper lobe and para-aortic adenopathy of 13 mm, hypermetabolic on 18FDG PET-CT with SUVmax of 7. The diagnostic approach to the pulmonary nodule by bronchoscopic navigation was not diagnostic, so the approach to the para-aortic adenopathy was consensual. Under moderate sedation, with the bronchoscopic ultrasound BF-UC 190 F (Olympus, Ishikawa-cho, Tokyo, Japan), airway exploration was performed with poor ultrasound visualization of the adenopathy, followed by esophageal exploration, achieving an adequate window to perform aspiration puncture with a fine needle 21G of 4 cm in length (Olympus, ViziShot, Tokyo, Japan) through the aortic artery under real-time ultrasonographic visualization, obtaining a cellular block with anatomopathological result was epidermoid carcinoma of the lung (Fig. 1, video 1). There were no immediate or late complications related to the procedure. The transaortic approach to the para-aortic adenopathies (station 6) through the esophageal route was performed exclusively with endoscopic ultrasound (EUS); to our knowledge there are no reports of transaortic approach with EUS-B.[1,2] We report the first case for lung cancer diagnosis. EUS-B-TVNA can be a diagnostic alternative in selected cases where no other approach is possible, the risk–benefit ratio should be assessed and the decision made by a multidisciplinary committee. The possible complications of transvascular punctures are hematoma and pseudoaneurysm, so these procedures should be performed by experienced specialists.[1,2]

Informed Consent

Informed consent was obtained from the patient for the publication of his clinical data and the use of diagnostic images.

Artificial Intelligence

We do not use artificial intelligence.

Funding

We did not receive any funding.

Conflict of Interests

None declared.

Appendix A. Supplementary Data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.arbres.2025.03.008.

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