

Clinical Image

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Incidental finding during EBUS-TBNA

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Description

Patients with malignancies, particularly advanced-stage cancers, are at an increased risk for thromboembolic events, such as Pulmonary Embolism (PE). Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration (EBUS-TBNA) is indispensable for the diagnosis and staging of thoracic malignancies and evaluating metastatic extra-thoracic tumors. Additionally, EBUS offers insights into vascular pathologies, including PE, through systematic mediastinal assessment [1,2]. We present the case of a 58-year-old woman diagnosed with uterine sarcoma, referred for EBUS-TBNA to investigate suspected pulmonary and mediastinal metastasis noted on PET-CT. During the ultrasound examination of the hilar area, an enlarged 10R lymph node was sampled, and a hypoechoic structure within the right pulmonary artery branch was identified (Figure 1), suggestive of a PE. Complementary inspection with radial EBUS in RB10 revealed of a small, eccentric, lobulated echogenic lesion in the proximal position (Figure 2). Subsequent contrast-enhanced chest CT and iodine mapping confirmed thrombi in the right upper and lower lobar pulmonary arteries, extending into approximately 10% of the left pulmonary artery (Figures 3 & 4). Similar to previously reported findings, EBUS enabled the identification of a potentially life-threatening thromboembolic event, underscoring its

role beyond traditional cancer staging [3,4]. This case highlights the extended diagnostic potential of EBUS-TBNA beyond conventional oncological staging. While the procedure was primarily conducted to evaluate metastatic spread, it incidentally revealed a critical thromboembolic event. This underscores the value of thorough mediastinal and hilar evaluation during EBUS, which can uncover clinically significant findings. Broadening the application of EBUS in oncological care may enhance patient management by detecting unexpected pathologies [1,3].

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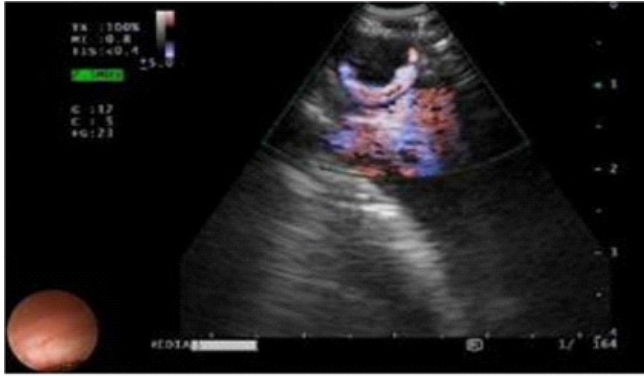


Figure 1: EBUS image demonstrating a hypoechoic structure in the right pulmonary artery branch, accompanied by color Doppler signals, strongly indicative of a pulmonary arterial embolism. This incidental finding highlights the expanded diagnostic capabilities of EBUS beyond its conventional role in oncological staging and biopsy.

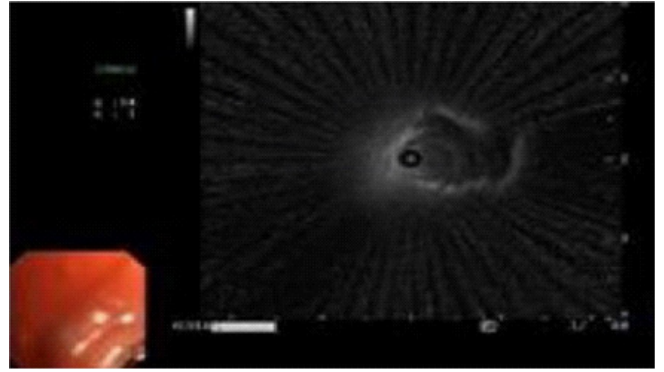


Figure 2: Complementary inspection with radial EBUS in RB 10 revealed a small, eccentric, lobulated echogenic lesion in the proximal position.

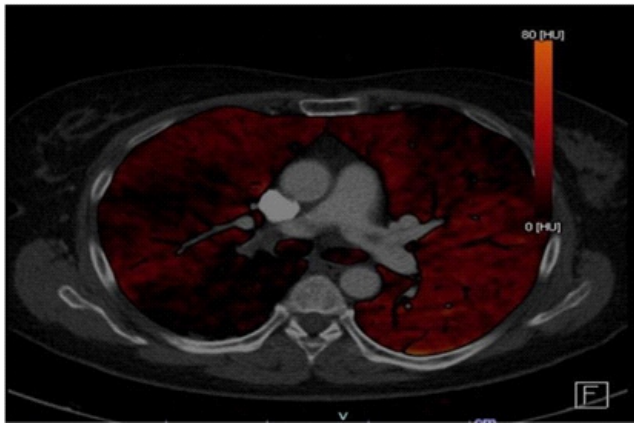


Figure 3: Iodine map of the patient's chest CT scan showing bilateral black areas that are hypoperfused, particularly on the right lung, perfused by the right pulmonary artery.



Figure 4: Chest CT scan, mediastinal window, showing a major block of the perfusion on the right pulmonary artery.