

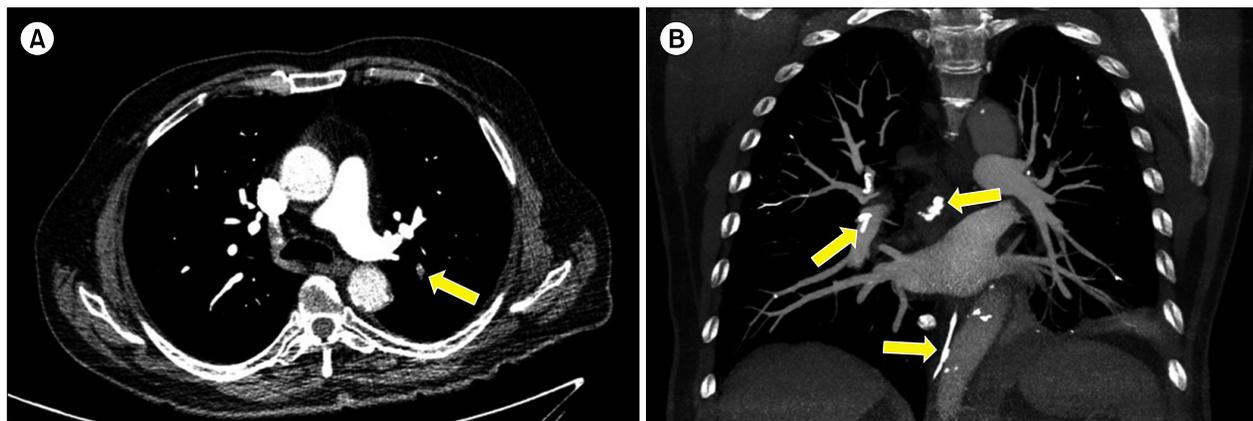
Methacrylate pulmonary embolism after percutaneous vertebroplasty

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A 77-year-old patient with atrial fibrillation treated with acenocoumarol underwent a kyphoplasty with methacrylate injection in T12-L4. Twenty-eight days later, he visited the emergency room with right costal pain that increased with deep breaths. His blood pressure was 144/83 mmHg, heart rate 91 bpm, and oxygen saturation 95%. Pulmonary auscultation revealed crackles in the left lower lung. His international normalized ratio was 1.5.

A chest X-ray revealed calcium-density images on both lungs. A pulmonary computed tomography (CT) angiography (A, B) showed high-density material in the segmentary and subsegmentary pulmonary arterial branches bilaterally and a pulmonary embolism (PE) in the left lower lobe with no right ventricle overload. Transthoracic echocardiography showed a normal right ventricle and no pulmonary hypertension.

He received low-molecular-weight heparin (bemiparin, 115 UI/kg) and was admitted to the Venous Thromboembolism Unit of Internal Medicine. He later received rivaroxaban. Twelve months after the PE, he remains asymptomatic with persistent calcium-density images on control chest X-rays.

Although anticoagulant treatment duration in patients with methacrylate-associated PE has not been clearly established, herein, it was maintained indefinitely due to his atrial fibrillation.

The true incidence of methacrylate-associated PE is unknown since most patients remain asymptomatic. CT is effective for its detection.