

## **Original Research Paper**

Surgery

## PULMONARY CEMENT EMBOLISM CAUSING LOCALIZED DISTAL OBSTRUCTIVE PNEUMONITIS

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**KEYWORDS**:



Fig 1



## Fig 2

A 71-year-old female who had undergone percutaneous vertebroplasty for a L3-4 compression fracture by an orthopedic surgeon last year was admitted to our hospital for right lower lobe pneumonia with impending respiratory failure. Computed tomography (CT) showed bone cement in her paravertebral veins (Fig. 1A & B, arrows) and the basal segment of the right pulmonary artery causing external compression to the basal segmental bronchus. This resulted in distal obstructive pneumonitis of the right lower lobe (fig 1C). Bronchoscopy was performed to exclude the possibility of the presence of a bronchial foreign body. The patient was treated with video-assisted thoracoscopy right basal segmentectomy. The bone cement was extracted from the right lateral and posterior basal segmental pulmonary arteries from the removed organs (fig 2). The post-operative course was uneventful.

Heparinization and six months of coumarin therapy is suggested for patients diagnosed with newly onset pulmonary cement embolism after receiving percutaneous vertebroplasty [1]. In these images, we present a rare case of a localized pulmonary cement embolism causing distal segmental bronchus obstruction and pneumonitis, which were successfully treated with surgical intervention.

## Reference

 Krueger A, Bliemel C, Zettle R, Ruchholtz S. Management of pulmonary cement embolism after percutaneous vertebroplasty and kyphoplasty: a systematic review of the literature. Eur Spine J 2009;18:1257.1265.