



Bone Cement Embolization: A Clinical Image

Nasim Khajavirad¹, Sediqeh Hosseini-Shabanan¹

1- Department of Internal Medicine, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

Received: 01 August 2017

Revised: 09 September 2017

Accepted: 20 September 2017

ARTICLE INFO

Corresponding author:
Nasim Khajavirad

Email:
nkhajavirad@yahoo.com

Keywords:

Bone cement; Pulmonary embolism; Vertebroplasty

Citation: Khajavirad N, Hosseini-Shabanan S. **Bone Cement Embolization: A Clinical Image.** Case Rep Clin Pract 2017; 2(3): 89-90.

Introduction

A 70-year-old man presented with 2 weeks non-productive cough started after flu-like symptoms. The patient had been undergone percutaneous vertebroplasty using acrylic osseous cement injection 1 month before, for his osteoporotic lumbar vertebra fracture. Physical examination revealed nothing unusual finding. A chest radiograph showed branching linear hyperdensity in both lungs conform to pulmonary vascular marking (Figure 1, Blue arrows).

According to his medical history, pulmonary bone cement embolization was considered as the diagnosis. Accidental finding was a round well-defined hyperdense opacity placed at the upper border of the stomach (Figure 1, White arrows), which by endoscopy revealed to be a

bezoar that removed with endoscopic fragmentation and retrieval.

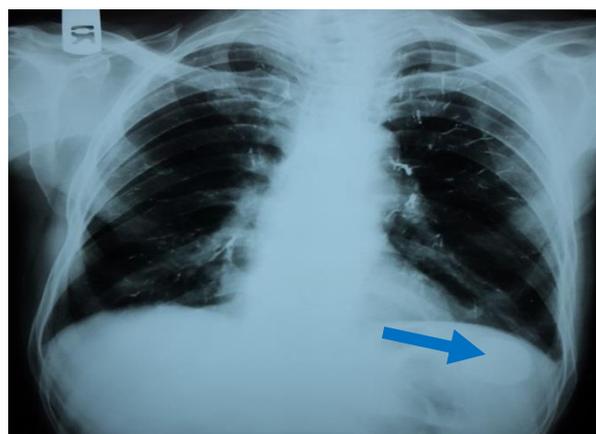


Figure 1. Posterior-anterior (PA) chest radiogram which shows branching linear hyperdensity in both lungs (Blue arrows), and round well-defined hyperdense opacity placed at the upper border of the stomach (White arrows).

The patient treated conservatively as it should be done in most cases of cardiovascular and pulmonary complications of pulmonary cement emboli. His symptom and chest radiogram signs resolved gradually after 2 months of follow-up.

Pulmonary bone cement embolization is a well-known complication after vertebroplasty with cement that mostly is asymptomatic (1, 2). Treatment depends on severity of symptoms; asymptomatic patient require no treatment, but in symptomatic patient, different types of treatment methods are suggested such as surgical removal, anticoagulation, corticosteroids, and antibiotics (1, 3).

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

We thank our patient for participating in this study.

References

1. Sinha N, Padegal V, Satyanarayana S, Santosh HK. Pulmonary cement embolization after vertebroplasty, an uncommon presentation of pulmonary embolism: A case report and literature review. *Lung India* 2015; 32(6): 602-5.
2. Rothermich MA, Buchowski JM, Bumpass DB, Patterson GA. Pulmonary cement embolization after vertebroplasty requiring pulmonary wedge resection. *Clin Orthop Relat Res* 2014; 472(5): 1652-7.
3. Krueger A, Bliemel C, Zettl R, Ruchholtz S. Management of pulmonary cement embolism after percutaneous vertebroplasty and kyphoplasty: A systematic review of the literature. *Eur Spine J* 2009; 18(9): 1257-65.