An unprecedented radiological presentation of a pulmonary cement embolism

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DESCRIPTION

A 49-year-old man was admitted to our intensive care unit for acute respiratory failure following cytomegalovirus pneumonia. His medical history included glioblastoma and percutaneous vertebroplasty (with polymethyl methacrylate) for osteoporotic vertebral compression fractures. Thoracic CT scans showed twisted endovascular material in the right pulmonary artery, as well as bilateral hyperdense emboli (figure 1). These findings were also found on the chest X-ray (figure 2). Importantly, they were absent prior to the vertebroplasty, while a central venous access device was already implanted. Antiviral treatment allowed complete

Figure 2 Chest X-ray. Uncommon presentation of proximal cement pulmonary embolism (arrowhead) associated with bilateral distal radiodense emboli.

Figure 1 Thoracic CT scan. (A) Presence of a twisted cement embolism in the right pulmonary artery. (B) Coronal reconstruction showing bilateral pulmonary emboli with leakage of cement into the right paravertebral venous system (arrow).

resolution of the pneumonia. Therefore, we made a diagnosis of asymptomatic cement pulmonary embolism. No specific treatment was required.

Proximal pulmonary cement embolism is an uncommon complication occurring after vertebroplasty.¹ It is due to the cement's intravasation into the vertebral venous plexus and its leakage into the pulmonary arterial circulation.¹ Severe clinical repercussions requiring specific treatment (eg, surgery or material retrieval) remain rare.²

Learning points

- ▶ Most cases have no clinical repercussions.
- ▶ Conservative management is recommended.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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