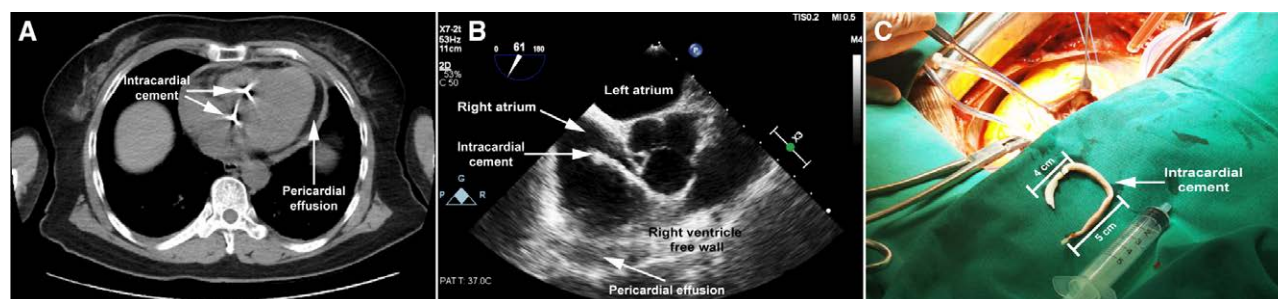


# Intracardial Cement in Postanesthesia Care Unit

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A 59-yr-old female presented with worsening shortness of breath and chest pain in the postanesthesia care unit 2h after vertebroplasty with cementing. Stat chest computed tomography revealed intracardial foreign body and pericardial effusion (panel A). Considering the recent cementing, the foreign body was suspected to be cement. An urgent surgical intervention was prepared. After induction, transesophageal echocardiography showed pericardial effusion and a highly echogenic object floating in the right atrium and right ventricle with one end pointing to the right ventricle free wall (panel B). The chest was opened under cardiopulmonary bypass and transesophageal echocardiography guidance. U-shaped cement with a 5-cm long arm and 4-cm short arm was removed from the right atrium (panel C). The cement was rigid and both ends were sharp. Vertebroplasty with cementing can cause cement embolism,<sup>1</sup> more commonly seen as pulmonary cement embolism. Small emboli may not be clinically significant; however, large emboli could present as rigid and sharp foreign bodies that may perforate the major vessel or heart, resulting in catastrophic events. The early diagnosis may be challenging as the presentation could be nonspecific and occur with delay. The anesthesia care team must be cautious for cement embolism and closely monitor vital signs intraoperatively and postoperatively. Once the diagnosis of cement emboli is made, prompt intervention to locate and remove the cement emboli should be carried out, as the features of its rigidity and sharpness may cause catastrophic events and the urgency of its management should be differentiated from other kinds of emboli.<sup>2,3</sup>

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## Competing Interests

The authors declare no competing interests.

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