## Letter to the Editor

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## How to Prevent Leaving "Needle Cast" or "Cement Tail" in Vertebroplasty and Kyphoplasty

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Nowadays, percutaneous vertebroplasty, or its evolution kyphoplasty, is a valid therapeutic option for the management of severe back pain, caused by vertebral compression fractures (1). They are minimally invasive, radiologically guided interventional procedures, which involve the injection of polymethylmethacrylate (PMMA) into the fractured vertebral body. The injection process was monitored continuously, under a fluoroscopic control in the lateral plane (2).

Ideally, the injection should be completed in 5 to 6 minutes and before the PMMA becomes too viscous to allow reinsertion of the stylus. This is not always possible, but is preferred to avoid the risk of leaving a "needle cast" or a "cement tail", within the soft tissues, as the needle is removed with the adherent cement (Fig. 1). In the event that the reinsertion cannot be achieved, great care should be taken to dislodge the adherent PMMA cement before extracting the needle from the vertebral body (3).

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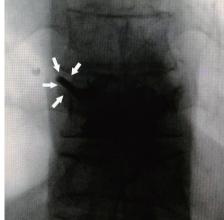






Fig. 1. "Needle cast" or "cement tail" (white arrows).

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