

## **e** Percutaneous Osteoplasty for the Treatment of a Painful Osteochondral Lesion of the Talus: How to Prevent Hydroxyapatite Bone Cement Leakage

### **To the Editor:**

It is with great interest that we read the article by Seo et al, "Percutaneous Osteoplasty for the Treatment of a Painful Osteochondral Lesion of the Talus: A Case Report and Literature Review," published in the 2012 September/October issue of *Pain Physician* (1).

This is a well-prepared case report which presents a novel surgical procedure using calcium polyacrylate-hydroxyapatite cement in percutaneous osteoplasty for the treatment of a painful OLT. As the authors mentioned in the article, one of the surgical risks is extravasation of bone cement into the ankle joint. Vigilant fluoroscopic and arthroscopic monitoring is essential. However, there are some other tips to prevent cement leakage.

First, slow injection of the bone cement is the key factor. Second, excessive fluid around the operative site induces partial dissolution and resorption of the implanted cement in the process of hardening the cement paste (2). So before injection of the cement, surgeons should make sure that no active bleeding and no excessive cystic fluid or contrast medium exists. Third, they should make sure the cement paste is mostly set within approximately 6 minutes after mixing at 37°C in a humid atmosphere (2). So after the injection of the cement, the patient should be immobilized for 6 minutes or more.

In summary, when using hydroxyapatite bone cement in percutaneous osteoplasty for the treatment of

bone defect, cement leakage can be prevented by some tips introduced above.

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