

Letters to the Editor



Transarterial Embolization Followed by Percutaneous Vertebroplasty in Treating Vertebral Metastases with Paravertebral Extension

TO THE EDITOR:

It was with great interest that we read the article by Wang et al, "Sequential Transarterial Embolization Followed by Percutaneous Vertebroplasty Is Safe and Effective in Pain Management in Vertebral Metastases," published in the 2016 May/June issue of *Pain Physician* (1).

This is a well-designed retrospective article which demonstrates that sequential therapy of transarterial embolization (TAE) followed by percutaneous vertebroplasty (PVP) is effective in treating vertebral metastases with paravertebral extension. The result is satisfactory, which showed significant pain relief in all cases. However, we have some suggestions.

PVP failed to relieve the pain of patients with paravertebral extension, which may be because of soft-tissue masses stretching the periosteum and compression on the local nerves and bones (2). TAE is thought to devascularize the tumor and lead to tumor necrosis. So the authors combined TAE and PVP together to relieve the pain and stop tumor progression. In the study, the pain was relieved significantly within 3 months postoperatively, but recurred at about sixth months postoperatively. We suggest that postoperative computed tomography should be performed to confirm whether there is shrinkage of the paravertebral lesion or tumor recurrence, which is helpful to find out the mechanism of pain change.

In the article, the authors pointed out that satis-

factory cement distribution should be achieved during the PVP procedure. It is speculated that the pain relief after PVP was not only related to the

reinforcement of the vertebral body by bone cement, but also to the chemical and thermal effects, which may damage the sensory nerve endings and kill the tumor cells (3). In addition, the space occupying effect of bone cement may inhibit tumor cell growth(4). Therefore, to prevent local recurrence, we suggest that the destructive area should be filled with cement as much as possible and the normal area should also be augmented.

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