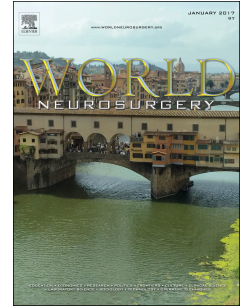


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Tumor needle tract seeding following percutaneous vertebropl

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A 57-year-old woman patient with metastatic breast cancer presented to our hospital with a firm 2-cm skin nodule in her back (Figure 1). The patient had undergone a percutaneous vertebroplasty (PVP) with polymethylmethacrylate followed by radiation therapy of a metastatic L2 vertebral body for pain control 6 months earlier. The skin nodule was located in the paravertebral region near the site of the previous PVP puncture site. A whole-body computed tomography (CT) confirmed the skin lesion but also revealed a subcutaneous extension of the nodule towards the left paravertebral muscle and the left pedicle of L2 following the trajectory of the needle used for the PVP (Figure 2). The diagnosis of tumor needle tract seeding (NTS) was suggested based on the CT images; CT also demonstrated new lung nodules and liver metastases. A biopsy of the skin nodule confirmed the suspected diagnosis of metastatic breast cancer. The patient's clinical picture has slowly deteriorated from breast cancer progression in spite of systemic chemotherapy.

PVP is an effective treatment of painful malignant vertebral compression fractures in cancer patients. Complications related to this procedure are uncommon and usually minor, but more frequent than in non-neoplastic vertebrae, and include cement leakage into the spinal canal, pulmonary embolism, bleeding, spondylitis, and fractures. The most plausible explanation of NTS is that tumor cells seeding occurs along the tract of the needle used for the PVP of a metastatic vertebra. Tumor NTS has only been described twice in lung cancer patients that have undergone PVP for pain control of metastatic vertebral lesions, but to our knowledge this is the first case in a breast cancer patient.^{1,2} The management of this rare complication should be decided by a multidisciplinary tumor board, depending on the clinical situation of the patient and the tumor sensitivity to the different therapies.

REFERENCES

1. Lee CH, Lee JW, Hyun SJ, Kim KJ, Jahng TA, Kim HJ. Needle-tract seeding after percutaneous vertebroplasty: a case report. *Spine*. 2014;39:E752-756.

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