

**FC-057****Vertebroplasty: an alternative treatment in selected pathological spine fractures. Our experience**

L. Babbi, G. Barbanti Brodano, S. Terzi, A. Gasbarrini, S. Bandiera, **R. Ghermandi**, S. Boriani
Istituto Ortopedico Rizzoli, Bologna, Italy

Introduction: Axial pain is frequently associated with pathological vertebral body fracture (PVF). Vertebroplasty (VP) can be a good minimally invasive percutaneous procedure alternative to conservative treatment, as radiotherapy, or open surgical procedures, usually highly invasive in nature. The palliative role of VP is investigated in a consecutive series of patients.

Methods: 21 patients affected by VPF from plasmocitoma (14 cases), haemangioma (4 cases), breast cancer metastasis (2 cases), NH lymphoma (1 cases) underwent a total of 43 vertebroplasty under local (14) or general (7) anesthesia from November 2004 to November 2014. 13 were females and 8 males, mean age was 61, 3 years (27-85). Most common level were T12 (8 cases), L3 and L4 (6 cases each).

Vertebroplasty was performed under fluoroscopy with PMMA in 17 cases and silicon in 4 cases through mono-bipedicle posterior access. Preoperative or intraoperative trocar-biopsy was performed.

Results: Average follow up was 11months (1- 57); 4 patients were lost at FU. Preoperative, postoperative and longterm radiological and clinical evaluation was collected. No cases of cement leakage occurred. All patients benefited from surgery postoperatively with pain disappearance in 16 cases, pain lowering in 5. Long term pain was under control in 2 patients, absent in 14 and higher in 1 patient with adjacent fractures at 5th month FU. 4 patients recovered after adjuvant treatment; 12 patients are alive with disease.

Conclusion: Indications for percutaneous vertebral augmentation procedure in patients with PVF is intense intractable pain in (1) patients with lytic metastasis at high risk of developing complications during open surgery, in (2) RT not sensitive disease, in (3) good prognosis primary lesion responding to onchological treatment.

Slerotic lesions, high mechanical instability, neurological compression, adhiuvant radiotherapy are absolute controindications. Percutaneous vertebral augmentation represents a powerful tool in the management of oncology patients who suffer from painful PVF due to the minimally invasive nature of the procedure.