

*Brief communication***Osteoporosis - associated vertebral compression fractures****D. Adam, Ioana Hornea, B.O. Ene**

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Background

Osteoporosis is a degenerative bone disease characterised by bone loss or brittle bones. While the outside of the bone more or less stays the same, inside the bone substance disintegrates. The affected bone can cope with less strain than healthy bone. Being a silent disease is often diagnosed when the patient breaks a bone. Bone fractures can cause severe pain, restrict mobility and generally reduce the quality of life.

The spine is commonly affected by osteoporotic fractures. The vertebral bodies of the thoracic and lumbar spine are under greatest degree of pressure.

In most cases, the vertebral body becomes stronger by itself and the pain recedes with bed rest, pain killer and physical therapy. If the pain is severe and persistent surgical treatment should be considered: open surgery stabilisation or low invasive techniques.

Material and methods

In 2008 we treated 5 patients with vertebral compression fractures: 3 males and 2 women, with ages between 40 and 72 years, by kyphoplasty (1 patient) and vertebroplasty (4 patients).

Preoperative diagnosis was performed based on plain X-rays and STIR-weighted MRI.

Vertebral augmentation is based on a minimally invasive approach to the vertebral body, transpedicular for the lumbar spine or parapedicular for the thoracic spine and cement injection using Vertecem Vertebroplasty by Synthes and Kyphoplasty Kitt by Kyfon, under C-arm control.

The female patient 70 years old, is the first kyphoplasty case reported by neurosurgeons in Romania.

Results

At 3 hours after the procedure, all patients were pain-free. At 24 hours they resumed mobility and were discharged.

In 1 patient we had a little cement leak lateral of the vertebral body.

Conclusions

Kyphoplasty and vertebroplasty are efficient methods for the treatment of vertebral compression fractures. Increasing experience, associated with a careful selection of cases will diminish the risks of leakage and make the procedures safer.