

Patient history

It is by no means unusual for elderly women with osteoporosis to suffer a sudden onset of acute low back pain, and here was a 76-year-old female retiree with exactly that complaint. Her primary-care physician took X-rays of the low back, but these showed no pathologies to explain the symptoms. Moreover, the patient could recall no incident of trauma or falling down that might have acted as a triggering event. As she stated, the pain – quite intense – suddenly one day came upon her.

The doctor prescribed an anti-inflammatory drug, a muscle relaxant and a low-dose hydrocodone tablet (the latter to be taken two to three times daily), but the pain was refractory to treatment with these medications. The doctor next ordered physical therapy on the notion that the pain might be related to muscle strain. However, after several weeks of core stabilization and strengthening-and-conditioning work, the patient still showed no improvement.

Exasperated, the primary-care physician then referred the patient to us.

Case description

The patient presented with pain described as a deep aching that worsened when she bent forward, backward or to the sides – in short, any amount of activity provoked a sharp pain response. Laying supine and motionless provided slight relief. Her Visual Analog Scale pain score registered an 8.

We observed her pain to be located at midline – the D-12/L-1 level – without significant radiation of pain to her lower extremities below the knee. Suspecting an undiagnosed compression fracture, we ordered MRI of the thoracic and lumbar spine. These images revealed what the X-rays missed: a very mild superior end-plate compression deformity at the D-12 vertebral body.

Treatment plan

With concurrence of the patient and her primary-care physician, it was decided that we would perform a vertebroplasty at D-12.

And until the procedure was performed, we also continued the medication regimen that had been prescribed by her primary-care doctor – to it we added a fentanyl transdermal patch to be administered once daily every three days.

Outcome

Immediately after the vertebroplasty, the patient experienced significant improvement in pain symptoms. Her postoperative Visual Analog Scale score was 2.5. We discontinued the fentanyl transdermal patch along with the other medications.

The patient was followed up one week later. She expressed complete delight with the results. We told her to come back to our office only if she experienced a return of the pain; we have not seen her in the nine months since then.

Discussion

Patients typically experience more than 90% improvement in pain symptoms within one hour after vertebroplasty, an image-guided percutaneous interventional procedure intended to eliminate the need for invasive spine surgery.

The procedure entails insertion of a needle into the vertebral body itself (no more than local anesthesia and mild sedation are necessary). Next, a measured amount of cement is pressure-injected through the needle. The cement begins turning to bone in approximately 10 minutes or less and is fully set after one hour.

Vertebroplasty is most effective in cases of recent acute vertebral compression fracture, somewhat less so in cases that occurred longer than 18 months earlier. However, regardless of fracture age, vertebroplasty is a procedure well-worth performing on appropriate patients because of the significant decreases in pain it so often delivers. Further, primary-care physicians should keep in mind the possibility that they are dealing with acute vertebral compression fractures when elderly patients – women with osteoporosis in particular – complain of sudden new onsets of low back pain.

Call 225-368-2300 today to schedule your preferred appointment time. We encourage, honor and welcome your referrals.

