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NEWSLETTER



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Percutaneous Vertebroplasty Offered in Ambulatory Setting

Recently we have begun offering percutaneous vertebroplasty (P.V.) to patients with painful acute or subacute compression fractures in the office setting. Patients who may benefit from the procedure include individuals with either traumatic or osteoporotic compression fractures of the thoracic or lumbar spine. In addition patients with malignant compression fractures may also be suitable candidates for the procedure. Patients should generally be treated conservatively for 2-4 weeks after the fracture with analgesics, bisphosphonates and inhaled calcitonin, the latter of which may convey some analgesic benefit. Bracing may also be considered but we have not found this to be very beneficial.

Epidural steroid injections may also be offered near the site of the fracture and will often improve symptoms. For patients who continue to experience significant symptoms despite the above mentioned conservative treatments, percutaneous vertebroplasty should be considered.

The procedure is performed in the office under light sedation and involves placing cannulas into the collapsed segment under fluoroscopic guidance. Traditionally a transpedicular

approach is used taking care not to injure any neural structures. Once properly positioned, 3-5 ml of polymethylmethacrylate (bone cement) is injected into the vertebral body. Generally two cannulas are used to assure bilateral spread and improve clinical results. Patients are discharged home about one hour after the procedure.

Diagnosis of compression fractures is generally made with magnetic resonance imaging (MRI) which should include STIR sequencing to help demonstrate edema within the vertebral body. Such edema is seen as white high signal intensity on STIR images and indicates a recent acute or subacute fracture. Bone scans may be positive for up to one year after fractures and are thus more sensitive but less specific. Plain x-rays may also be value but cannot determine the chronicity of the injury and hence whether P.V. is indicated.



Fig. 1. L₄ percutaneous vertebroplasty

For Information and Referrals:

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