

Orthopaedic Connection

Vertebroplasty

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Transforming patient information into patient understanding.

Vertebroplasty. Have you heard of it? It has been in the news lately. As you probably figured out, it has something to do with the spinal vertebrae. Simply stated it is a technique for repairing spinal vertebrae that have undergone a fracture. The procedure has been around for several years and I am very familiar with it.

The Problem

There are hundreds of thousands of fractures of the spine in our country each year. Actually there are many more spinal fractures than hip and wrist fractures each year. All three are common in my practice, but spine fractures are the most.

Osteoporosis

Osteoporosis as you have guessed is the villain, the underlying cause of most spinal fractures. It silently compromises bone strength and predisposes the affected bone to fracture - the spine, the wrist, the hip.

Occurrence

Vertebral fractures mostly occur spontaneously. In other words the bone just collapses when it becomes weak enough. Other fractures result from loading the spine during daily activities such as bending, lifting objects and climbing stairs.

These fractures are especially common in postmenopausal women over 55 with lower bone mineral density.

Users of steroids unfortunately have a 6 fold increased risk of fracture. That's discouraging.

Most fractures are located at the T7, T8 level and the T12, L1 level. The fractures can occur with minimal symptoms, pain ranging from mild to severe. The bone may collapse acutely or slowly over time.

Indication For Vertebroplasty

The typical patient has had symptoms about 8 weeks before the procedure is done. The procedure is done to relieve pain and prevent further collapse of the vertebral bone.

The procedure is done in the Radiology (x-ray) Department of the hospital by a radiologist or spine surgeon. Local anesthesia and sedation are used. Patients are either discharged the same day or sometimes kept over night.

Technique

Two small incisions are made in the back for placement of cannulas into the broken vertebral bone. Bone cement in a semi liquid state is then injected to fill the bone. The cement hardens in several minutes and remains solid in the bone. Usually one vertebra is injected, but sometimes two vertebrae can be injected if needed. The procedure is done under sophisticated x-ray control with equipment called an image intensifier. The injection of the bone cement is carefully observed continuously with the image intensifier during injection.

Results

I can hear everybody saying, "Wow, that sounds wonderful". What could be better?

Next week I will look at the results carefully with you and cover a related technique called balloon kyphoplasty.

Check out our office teaching website www.orthopodsurgeon.com and Your Orthopaedic Connection for more information about vertebroplasty and kyphoplasty.

Our goal is simple - To help people return to more pain free, functional lives.

Good health. Good life. All the best to you.

Be well. See you next week.

Dr. Haverbush