What is Vertebroplasty and Kyphoplasty?

Vertebroplasty and kyphoplasty are minimally invasive procedures for the treatment of vertebral compression fractures, which are fractures involving the vertebral bodies that make up the spinal column. When a vertebral body fractures, the usual rectangular shape of the bone becomes compressed, causing pain. These compression fractures may involve the collapse of one or more vertebrae in the spine and are a common result of osteoporosis. Osteoporosis is a disease that results in a loss of normal bone density, mass and strength, leading to a condition in which bones are increasingly porous and vulnerable to breaking. Vertebrae may also become weakened by cancer.

How does the procedure work?

Using image-guidance, a neurosurgeon will pass a hollow needle called a trocar through the skin into the vertebral body for injection of the cement mixture into the vertebra. Vertebroplasty involves injecting the cement mixture directly into the empty spaces within weakened vertebrae to strengthen them and provide pain relief. In kyphoplasty, a balloon is first inserted through the trocar, into the fractured vertebra, where it is inflated to create a cavity for cement injection. The balloon is removed prior to injecting cement into the cavity that was created by the balloon. Vertebroplasty and kyphoplasty are highly effective procedures used to treat painful vertebral compression fractures in the spine. Typically, vertebroplasty/

kyphoplasty is recommended after less invasive treatments, such as bed rest, a back brace or pain medication, have been ineffective, or once medications begin to cause undesired side effects, such as stomach ulcers or changes in mental status. Vertebroplasty/kyphoplasty can be performed urgently in patients with problematic pain requiring hospitalization or for conditions that limit bed rest and pain medications, however many can be performed electively in an outpatient setting.

Vertebroplasty and kyphoplasty is also performed on patients who:

- are too elderly or frail to tolerate open spinal surgery, or whose bones are too weak for surgical repair
- have vertebral compression due to a malignant tumor
- are younger, with osteoporosis due to long-term steroid treatment or a metabolic disorder

Vertebroplasty or kyphoplasty should be completed within eight weeks of the acute fracture for the highest probability of successful treatment. If you or someone you know is suffering from pain due to a vertebral compression fracture, ask your primary care physician for a neurosurgical consultation and evaluation for these very successful procedures.

Neurospinal Associates offers two convenient locations to serve their patients. In Bradenton, we are in the Riverwalk Professional Park at 200 3rd Avenue West, Suite 200, directly west of the Manatee Memorial Hospital and just North of the Bradenton Herald. Our Sun City location is 3909 Galen Court Suite 104. For more information, or to schedule an appointment, please call 941-794-3118 or visit our website: www.nsadoctors.com.