What is an Interventional Radiologist (IR)?

Interventional radiologists are board-certified physicians who specialize in minimally invasive, targeted treatments using X-rays, MRI and ultrasound. Utilizing the latest imaging technology interventional radiologists treat at the source of the disease non-surgically with less risk, less pain and less recovery time compared to open surgery.

What is Vertebroplasty & Kyphoplasty?

Vertebroplasty and kyphoplasty are minimally invasive procedures for the treatment of pain caused by vertebral compression fractures. This pain comes from the fragmented vertebral body that rub together especially when the patient moves.

What causes compression fractures?

These fractures are usually due to bone weakness from osteoporosis. Vertebrae may also become weakened by cancer or can become broken after a trauma.

What happens during a vertebroplasty/kyphoplasty?

In both procedures hollow needles are placed, under x-ray, into the fractured bone. In vertebroplasty a thin cement is injected through the needle into the bone. In kyphohplasty, balloons are first inserted into the fractured bone through the hollow needles to create a cavity and a thick bone cement is then injected after balloon removal. Both procedures stabilize the pain causing bone fragments.

What do these procedures accomplish?

Vertebroplasty and kyphoplasty are used to treat the pain caused by compression fractures.

When should kyphoplasty/vertebroplasty be used?

These procedures may be used after less invasive treatments, such as bed rest, back bracing or pain medication, do not provide adequate relief or are causing side effects. These procedures can be performed immediately after the fracture occurs in patients with intolerable pain.
Vertebroplasty and kyphoplasty should be completed within 2-3 months after fracture for the most effective treatment. The procedure should always be done before radiation therapy is begun.

**What will I experience during the procedure?**

You will be placed on your stomach and given IV pain medication and sedation. You may feel a pin prick from the local anesthesia placed into your skin. You should be very sleepy during the procedure, though breathing on your own.

**Will I be put “to sleep for the procedure”?**

The procedure is usually done under “conscious sedation” like a colonoscopy or cardiac catheterization. You will be breathing on your own.

**How will I feel after the procedure?**

You may be slightly groggy immediately after the procedure and you may not drive home from the hospital. For two or three days afterward, you may feel a bit sore at the point of the needle insertion. At home, patients may return to their normal daily activities. Pain relief is immediate for some patients. In others, especially if the fracture has been there for some time pain is more gradually reduced.

**Should I stop my medication for the kyphoplasty or vertebroplasty to be performed?**

All blood thinners need to be stopped before the procedure so check with your doctor about when you should do this. Otherwise you should take your morning medications with sips of water. You may restart blood thinners 48 hours after the procedure.

**What are the risks of vertebroplasty/kyphoplasty?**

There is a small risk of infection and bleeding. There is a very small risk of cement leaking vertebral body during injection. This is very rare as the entire procedure is done under X-ray to prevent this.