VERTEBROPLASTY

Vertebral compression fractures of the spine affect more than 700,000 people in the US each year. These fractures result primarily from osteoporosis, and may occur with even minimal trauma such as stepping off a curb, leaning over forward, or picking up a gallon of milk. The bones of those with osteoporosis become paper thin, and collapse in a fracture of the front of the vertebral body of the spine, but may fracture in other spine locations also. The bones of the thoracic spine and lumbar spine fracture more often than the neck vertebrae. These fractures usually result in severe pain directly in the midline of the back over a specific vertebrae that corresponds to the fracture. Standing causes severe pain. Frequently, the fracturing continues to occur over several days or weeks, causing prolonged pain, immobility, pneumonia, and blood clots in the legs. The inability to be physically active makes the osteoporosis worse, and can lead to more fractures.

WHAT IS VERTEBROPLASTY?

Vertebroplasty involves applying cement into the fractured vertebrae to stabilize the fracture, stop further fracturing from occurring at the same level, and results in rapid pain reduction in 85% of patients. It is performed as an outpatient and may be performed with sedation, general anesthesia, or under local anesthesia only. Large diameter needles are placed through the skin into the fracture site, and then iodine dye is injected to outline any vessels that might be at risk, and helps identify the complexity of the fracture. Cement is then mixed (the same type of cement used in hip replacement surgery) and slowly injected into the vertebral body under x-ray fluoroscopy guidance. The patient typically goes home in approximately two hours afterwards.

WHAT ARE THE ALTERNATIVES?

Waiting and doing nothing except pain medications is sometimes used but if the patient has severe pain on standing and cannot be mobile, it is better to perform the vertebroplasty early before complications occur due to immobility and lack of nutrition. Another alternative is kyphoplasty, which is preferred in...
the treatment of fractures cause by cancer and requires a brief hospital stay. Finally, there are anesthetic blocks and nerve destruction procedures that are occasionally used when vertebroplasty is not an option. Back braces may be of use.

- **WHO CAN HAVE A VERTEBROPLASTY?**
  1. Those with compression fractures of the spine (or fractures due to tumors of the spine) when conservative therapies of 2 weeks have failed to resolve the pain or the pain is extreme
  2. Patients without retropulsed segments (fracture fragments sticking into the spinal cord)
  3. Recent MRI or CT+Bone Scan studies.
  4. Patients without allergies to cement or iodine dye.

- **RISKS INVOLVED WITH THE PROCEDURE:** Cement moving outside the spine along nerve roots or in the epidural space causing weakness or numbness of the legs, cement embolizing into the lungs, paralysis, need for emergent surgery, infection of the spine/discs/epidural space, blood clots into the spine may all occur, but are uncommon in causing symptoms after the procedure.

- **SPECIAL INSTRUCTIONS:**
  - Stop Plavix 7 days before the procedure and stop coumadin 5 days before the procedure. Stop Ticlid (ticlopidine) 14 days before the procedure.
  - Nothing to eat or drink after midnight on day of the procedure except for routine medications.
  - The patient may drink WATER ONLY up to 4 hours before the procedure. You will need a driver afterwards that can stay in our lobby during the entire time you are in our facility.

- **AFTER THE PROCEDURE:**
  - You will remain in the surgery center or hospital for about one hour afterwards, then providing there is no new significant numbness or weakness, will be discharged to home. Typically the patient will engage in no activity the remainder of the day and will rest at home.

- **DISCHARGE INSTRUCTIONS:**
  - **Activity:** Resume normal gradually over a few days. Rest the first day
  - **Diet and Medications:** Resume normal diet and medications immediately
  - **Dressing:** You may have a small bandaid or bandaids placed over the injection site. This can be removed the next day
  - **Discomfort at the Injection Site:** Apply ice wrapped in a washcloth for short periods of time (20 minutes per hour) during the first 24 hours, then apply low to medium heat
  - **IV Site:** There may be soreness and bruising around the IV site, which will go away in a few days. A warm moist cloth placed over the area for half-hour periods several times a day will sometimes help. Increased tenderness or red streaking around the area of the IV site or increasing swelling of the hand requires attention. Our clinic needs to be notified if this occurs
  - **Side Effects:** Possible side effects include numbness or weakness that would occur immediately after the procedure. Later possible side effects include increasing back pain with infection and fever, difficulty moving the legs or new late onset numbness of the arms or legs, or loss of bowel/bladder control. Call us immediately if any of these occur.
  - **EMERGENCY CONTACT TELEPHONE NUMBER #281-265-0225**
  - **Return to Normal Activities:** You may experience some numbness in the skin over the back during the first several hours and numbness in the thigh for a period. There may be temporary numbness in the leg or foot up to 12 hours. If this persists beyond this time, call our office.
  - **Anesthetic Effects:** Refrain from operating motor vehicles within the first 12 hours after the injection. Do not plan to make any important decisions such as signing legal or important papers within the first 24 hours after the injection. Do not consume alcohol or sedatives within 12 hours after the injection.