Vertebroplasty and Kyphoplasty
Back stabilization without surgery

What are vertebroplasty and kyphoplasty?
Both are image-guided, non-surgical treatments used to strengthen a broken vertebra (back bone) that has been weakened by osteoporosis, cancer, or some other cause. Individual vertebra weakened by disease can collapse suddenly under the force of normal daily activity. This can cause severe pain, limited mobility, and an inability to do routine daily activities.

- **Vertebroplasty** is done by injecting an orthopedic cement mixture through a needle into the fractured bone.
- With **kyphoplasty**, an attempt is made to elevate the fracture by inserting a balloon into the compressed vertebral body before injecting the cement mixture.

Who should have vertebroplasty or kyphoplasty?
If you have significant back pain caused by a broken bone in your back and are feeling no relief despite bed rest and taking pain medicines, you may be a candidate for either of these procedures. Newer fractures tend to respond better than older fractures. Some older fractures can also be treated successfully.
How do these treatments work?

After vertebroplasty or kyphoplasty, the cement stabilizes the fracture and makes the vertebral body more sturdy, which prevents further collapse and deformity. The stabilization of the fracture relieves the pain. These effects are apparent within the first 24 to 72 hours after treatment.

Am I a candidate for either of these treatments?

First, you'll have a complete workup. Most times, the workup includes diagnostic imaging, blood tests, and an exam. Diagnostic imaging such as spinal X-rays, a bone scan or magnetic resonance (MR) imaging will be done to confirm the presence of a compression fracture that can be treated with vertebroplasty or kyphoplasty. If an MR cannot be performed, because of a pacemaker or other medical factor, a computerized tomography (CT) scan can be done instead. Based on the findings, your doctor will discuss with you which of the 2 procedures will be more beneficial and safer to do in your case.

How should I prepare for the treatment?

- Do not eat for at least 6 hours before the treatment.
- If you have diabetes, talk with your doctor for instructions on managing your blood sugar and diabetes medicines.
- If you are on blood thinners such as Coumadin or Plavix, you may have to stop taking them before the treatment.
- Talk with your doctor before stopping any medicines.
- Unless otherwise stated by your doctor, all other daily medicines should be taken on the day of the treatment. Swallow your medicine with only sips of water or clear liquids up to 3 hours before the treatment.
- Do not drink orange juice, cream, or milk.
- Arrange for an adult to drive you home after the treatment.
How are these treatments given?

It is important for you to be able to lay *prone* (on your belly) on an X-ray table for these treatments. You will be sedated (given medicines to help you relax and stay calm) and will receive a local anesthetic to numb the skin on your back, near the fracture. IV antibiotics may also be given to prevent infection. A nurse will be present with you throughout the treatment, and if you feel any discomfort, more sedation can be given. Our goal is to have you as comfortable as possible during the treatment.

A small needle is passed through your skin on your back until its tip is positioned exactly within the fractured vertebra. Once the needle is shown to be in the proper place, the cement is injected over the next 10 to 20 minutes.

The entire treatment is done using X-rays, which makes it very safe and reliable. The treatment usually takes about 1 hour (longer if more than one site is being treated). Most patients go home the same day, but sometimes an overnight hospital stay is needed.

What will I experience after the treatment?

- Strict bed rest is recommended for the first 2 hours, after which you can get up to use the bathroom.

- Increase your activity gradually. If you take blood thinners, check with your doctor, as you may be able to restart them the day after the treatment.

- For 2 or 3 days after the treatment, you may feel a bit sore at the needle entry site. But, rarely do you need any specific treatment for it. In fact, you should notice a decrease in the need for pain medicines compared to before the treatment.

- The tiny bandage on your back at the needle entry site can be removed in 2 to 3 days. The site must stay dry until the bandage has been removed.
Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. Clinic staff are also available to help.

- UWMC Imaging Services: 206-598-6200
- UWMC Interventional Radiology: 206-598-6209
- Harborview Imaging Services: 206-744-3105

After the procedure is over and you are home, call to schedule a visit with your primary care doctor in 2 weeks to discuss how you are feeling and to consider treatment for underlying osteoporosis and bone weakness, to prevent more fractures.

Anytime you have questions, please feel free to give us a call at 206-598-6209, or to call the hospital operator at 598-6190 and ask for the Interventional Radiologist on-call to be paged.