

Kyphoplasty and Vertebroplasty

How to prepare and what to expect

This handout explains vertebroplasty and kyphoplasty, treatments to strengthen a broken backbone. It describes how the treatments work, how they are done, how to prepare, and what to expect during the treatment.

Why do I need this treatment?

Fractures in the bones of the spine (vertebrae) can cause severe back pain and loss of movement. Your doctors believe that a kyphoplasty and/or vertebroplasty may help to relieve your pain and to prevent further collapse of the vertebrae.

How is the procedure done?

Vertebroplasty and *kyphoplasty* are treatments used to strengthen a broken *vertebra* (one of the bones in the backbone). Both treatments use imaging to guide the procedure. They do not involve surgery.

Kyphoplasty- Using image-guided X-rays, your doctor will insert a needle into the fractured vertebrae. A balloon device is inserted through the needle and inflated just the right amount to create a cavity. Then the balloons are removed. The spaces created by the balloons are filled with bone cement. This gives strength and stability to your vertebrae.

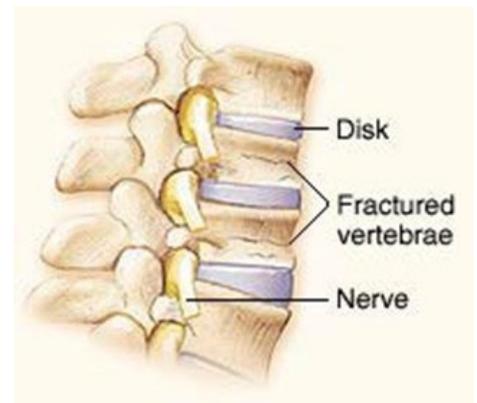
Spine jack - Using image-guided X-rays, your doctor will insert a needle into the fractured vertebrae. The needle will be exchanged for a small tube. An implant will be inserted through the tube. The implant will be expanded to reduce the deformity and create a small cavity. This space is then filled with bone cement. This gives strength and stability to your vertebrae.

Vertebroplasty- Using image-guided X-rays, your doctor will insert a needle into the fractured vertebrae. Bone cement will be injected into the fracture. This gives strength and stability to your vertebrae.

Your doctor will talk to you about what is the most appropriate procedure for you.

What are the risks and side effects?

The most common risks include bleeding, infection, temporary injury to adjacent neural structures, and injury to other non-neural surrounding structures.



Vertebroplasty and kyphoplasty are ways to treat broken bones



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this handout.

Following the procedure, there is a risk you may not experience the pain relief you were anticipating, or you may have significant procedure-related pain. The procedure-related pain will improve over a few days.

There are other much less common but sometimes serious side effects and complications. Your doctors will talk with you about these risks before you start treatment. Make sure all your questions are answered before your treatment begins.

Sedation

Before your procedure, you will be given a *sedative* (medicine to make you relax) through an *intravenous line* (IV) in one of your arm veins. You will stay awake but feel sleepy. This is called *moderate sedation*. You will still feel sleepy for a while after the procedure.

For some people, using moderate sedation is not safe. If this is true for you, you will need *general anesthesia* (medicine to make you sleep during the procedure).

Let us know **right away** if you:

- Have needed anesthesia for basic procedures in the past
- Have sleep apnea or chronic breathing problems (you might use a CPAP or BiPAP device while sleeping)
- Use high doses of an opioid pain medicine
- Have severe heart, lung, or kidney disease
- Cannot lie flat for about 1 hour because of back or breathing problems
- Have a hard time lying still during medical procedures
- Weigh more than 300 pounds (136 kilograms)

If you have any of these health issues, we may need to give you different medicines. Instead of a sedative, you might receive:

- Only a *local anesthetic* (numbing medicine), such as lidocaine.
- A local anesthetic and a single pain or anxiety medicine. This is called *minimal sedation*.
- *General anesthesia* (medicine to make you sleep). This medicine is given by an anesthesia provider.

Before Your Procedure

A nurse will call you within 5 days of your procedure. The nurse will give you important instructions and answer any questions you have.

- If you do not understand English well enough to understand the instructions from the nurse or the details of the procedure, tell us right away. We will arrange for a hospital interpreter to help you. A family member or friend cannot interpret for you.
- Most patients need blood tests done within 14 days of this procedure. We may be able to do your blood tests when you arrive for your procedure. We will tell you if we need a blood sample before that day.

- If you take any blood-thinning medicines (such as Coumadin, Lovenox, Fragmin, or Plavix), you may need to stop taking the medicine for 3 to 9 days before your procedure. Do NOT stop these medicines unless your doctor or nurse has told you to do so. We will give you instructions as needed.

You must arrange for a responsible adult to drive you home after your procedure and stay with you the rest of the day. You cannot drive yourself home or take a bus, taxi, or shuttle alone.

The Day of Your Procedure

To prepare for sedation, follow these instructions exactly. Starting at midnight, the night before your procedure:

- Do not eat or drink anything.
- Do not take any of the medicines that you were told to stop before this procedure.
- If you must take medicines, take them with only a sip of water. Do not skip them unless your doctor or nurse tells you to.
- Do not take vitamins or other supplements. They can upset an empty stomach.

When you go to the hospital, bring a list of all the medicines you take.

Please plan to spend most of the day in the hospital. If there is a delay in getting your procedure started, it is usually because we need to treat other people who have unexpected and urgent health issues. Thank you for your patience if this occurs.

At the Hospital

A staff member will give you a hospital gown to put on and a bag to put your belongings in. You may use the restroom at that time.

A staff member will take you to a pre-procedure area. There, a nurse will do a pre-procedure assessment. A family member or friend can be with you in the pre-procedure area.

An IV line will be started. You will be given fluids and medicines through the IV.

Your interventional radiology specialist will talk with you about the procedure, answer any questions you have, and ask you to sign a consent form, if you have not already done this.

After Your Procedure

You will be moved to a room on the short-stay unit at the hospital. Once you are settled into your room:

- Your family member or friend will be able to be with you.
- You will need to be monitored for 2 to 4 hours.
- You will be able to eat and drink.

Before you get up to walk, we will assess you to make sure you can walk safely. A nurse or patient care technician (PCT) will help you get out of bed.

You will be able to go home the same day when:

- You can eat, drink, and use the restroom
- Your nausea and pain are under control
- Your vital signs are stable

For 24 Hours

The medicine that you were given to make you sleepy will stay in your body for several hours. It could affect your judgment. You may also be lightheaded or feel dizzy. Because of this, for 24 hours:

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- Do not drive a car.
- Do not use machines or power tools.
- Do not drink alcohol.
- Do not take medicines such as tranquilizers or sleeping pills unless your doctor prescribed them.
- Do not make important decisions or sign legal documents.
- Do not be responsible for children, pets, or an adult who needs care.

To help your recovery:

- Do only light activities and get plenty of rest.
- A responsible adult should stay with you overnight.
- Eat as usual.
- Drink lots of fluids.
- Resume taking your medicines as soon as you start to eat. Take **only** the medicines that your doctors prescribed or approved. **You may restart blood thinning medications the morning after your procedure unless told otherwise.**

For 48 to 72 Hours

- Do not lift anything that weighs more than 5 to 10 pounds (a gallon of milk weighs almost 9 pounds).
- Do only gentle activities. You may gradually increase your activity over time.

Dressing Care

- For 24 hours, keep the needle insertion site covered with the dressing. Make sure it stays clean and dry.
- After 24 hours, remove the dressing and check the site for any signs that your wound needs care. See the list under “When to Call,” on page 5.
- You may shower after 24 hours. Do not scrub the needle insertion site. Allow warm soapy water to run gently over the site. After showering, gently pat the site dry with a clean towel.

- Do not apply lotion, ointment, or powder to the site. You may apply a new bandage.
- If you apply a new bandage, change it every day for the next few days. Always check the site when you remove the bandage.
- Do not take a bath, sit in a hot tub, go swimming, or allow your site to be covered with water until it is fully healed.
- You may have a little discomfort at the site for 1 to 2 days.

When to Call

Call us right away if you have:

- Mild fever, pain, redness, swelling at the puncture site or dizziness
- Mild shortness of breath, chest tightness or chest pain
- Any other non-urgent questions or concerns

Call 911 and go to the nearest emergency department if you have:

- Severe bleeding or any bleeding that does not stop after you have applied gentle pressure for about 15 minutes
- Drainage from your incision
- Fever higher than 101°F (38.3°C) or chills
- Shortness of breath that is getting worse
- New chest pain
- Dizziness
- Vomiting

Who to Call

University of Washington Medical Center and Northwest Hospital

Weekdays from 8 a.m. to 4:30 p.m., call the Interventional Radiology Department:

- Montlake: 206.598.6209, option 2
- Northwest: 206.598.6209, option 3

Harborview Medical Center

Weekdays from 8 a.m. to 4:30 p.m., call the Interventional Radiology Department at 206.744.2857.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

UWMC – Montlake:

206.598.6209, option 2

UWMC – Northwest:

206.598.6209, option 3

Harborview Medical Center:

206.744.2857

After hours and on weekends and holidays:

Call 206.598.6190 and ask to page the Interventional Radiology resident on call.