

Thoracic and Lumbar Spine Fusion Surgery

General Information

Spinal fusion surgery may relieve pain from arthritis, disc problems (degeneration, herniation or deformities) or the slippage of a spinal bone (vertebrae) on other cause (spondylolisthesis).

Your surgeon cannot guarantee you will feel relief after surgery.

The general hospital stay is 1 to 3 days.

About Surgery

This surgery fuses or “welds” the vertebral bones together to keep the painful areas from moving.

Your surgeon will place additional pieces of bone, bone graft materials or both, along the sides or between the vertebrae. The bone cells will grow and mature. Movement at this part of your spine will stop when the bone becomes solid and the vertebrae are fused together.

Bone used during surgery can be your own bone, from a donor, or both.

- Your bone would likely be taken from your pelvis. This would be from a separate incision (cut).
- Donor bone is from the American Red Cross or from another certified tissue bank. All bank bone is been carefully processed and sterilized.

Together, you and your surgeon will decide what is best for you before surgery.

Your spine surgeon may need to access the front part of your spine through an incision on your abdomen (belly), known as an anterior approach. If this is the case, a vascular surgeon will help with your surgery.

Your spine surgeon may also need to access the back part of your spine through an incision on your back, known as a posterior approach.

Some spinal fusion surgeries need both front and back incisions. Your surgeon will talk with you about your plan.

Your surgeon may recommend putting in hardware (plates or rods attached to the vertebrae by screws, hooks or wires). This helps keep the vertebrae being fused from moving.

Risks

All surgery has risks. Some general risks are:

- problems with general anesthesia (being put to sleep)
- lung problems
- blood clots
- infection
- fluid that pools near the incision site
- allergy to anesthesia
- injury to a major blood vessel that can cause death.

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Other risks include the following.

- Injury to a spinal nerve that could cause:
 - pain that will never go away
 - numbness or weakness in an arm or leg
 - loss of bowel or bladder control.
- Injury to the spinal cord that could cause long-term paralysis (not being able to move).
- The spinal fluid sac in the vertebrae can become punctured causing spinal fluid to leak.
 - If this happens, you would need to lie flat in bed for 48 hours to allow the puncture site to heal.
 - You may need an injection or future surgery to seal the puncture site. This would be rare.
- A lot of blood can be lost, which means you may need a blood transfusion. You have options: donating your own blood before surgery or using donor blood. Members of your health care team will talk with you about the risks and benefits of each.
- Your surgeon cannot guarantee the bone in your fusion will mature and become solid. (The process of your fusion will be checked with X-rays at your follow-up visits.)
- If you smoke, your chances of a successful solid fusion are lower than if you do not smoke. Talk with your health care provider about quitting smoking before surgery.
- The incision (cut) for an anterior (front) fusion is made on the side of the abdomen or thorax (rib cage). If you are a man: small nerves may be cut causing sterility (meaning you will not be able to father children). After surgery, your body will still make sperm but they are not ejaculated outside the body. Your ability to have an erection and orgasm are not affected.

Your surgeon will talk with you about all of the risks with your surgery. The risks are serious but the chance you have any of these is low.

Bracing

Members of your surgery team will decide if you need to wear a brace. If you do, you will be fitted for it and shown how to use it while you are in the hospital. You will wear the brace from 6 weeks to 3 months, depending on your bone strength.

Your Care After Surgery

Meet with social services before you leave the hospital if you need equipment (such as a hospital bed), home care or other services.

Members of your health care team can help arrange extra help.

Medicines

You will receive a prescription for a pain medicine before you leave the hospital.

- Use this medicine **only** when acetaminophen (Tylenol[®]) does not give enough pain relief.
- Limit acetaminophen to 4,000 milligrams each day.
- Do not to take nonsteroidal anti-inflammatory medication (NSAIDs) such as ibuprofen (Advil[®] and Motrin[®]) and naproxen (Aleve[®]) for 6 to 12 months after surgery. These medications can interfere with the fusion process.

Long-term use of prescription pain medicines may interfere with your body's natural ability to help control pain.

Over time, you need more and more pain medicine to receive the same pain relief. Use prescription pain medicine for only a few days.

Where To Bring Your Paperwork

Midwest Spine & Brain Institute can help you fill out paperwork if it is related to disability, FMLA or other medical legal forms.

Midwest Spine & Brain Institute does charge a fee for such paperwork to be complete.

Mail your paperwork to Midwest Spine & Brain Institute, Att: Medical Legal Department, 1950 Northwestern Ave. Suite 102, Stillwater, MN 55082. Allow 1 to 2 weeks for the forms to be completed and mailed to you.

Do not bring any of this paperwork with you to the hospital.

Call 651-259-4545 if you have questions. Leave a message for the Medical Legal Department.

Whom To Call With Questions

- Call 651-241-7246 to make an appointment.
- Call 651-430-3800 to talk with your health care team if you have any questions about your surgery.