

Scoliosis Surgery

Surgery is recommended when the spine has curved to such an extent that other forms of treatment will no longer help. You and your family, with the doctor's help, will make the decision whether or not to have surgery.

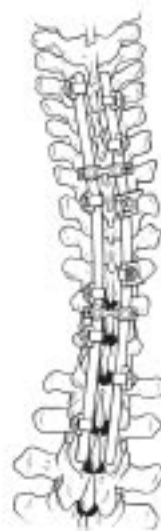
Goals of the Surgery

The goals of the operation are to (1) partially straighten the curve (usually 50 percent), (2) stop the curve from progressing and (3) decrease some of the rib prominence.

After surgery, you may notice there is still some prominence of the ribs. This may improve slightly over the course of several months as the muscles and rib cage readjust. It is important to discuss your expectations with your doctor before surgery so you will not be disappointed with the final results.

Posterior Spinal Instrumentation

This is the most common scoliosis surgery performed today. An incision is made down the middle of the back. It can be a fairly long incision, from just above the level of the shoulder blades down to the waist. Two metal rods are used, each about as big around as a pencil and about eight - ten inches long. The rods are made of titanium or stainless steel. Before attaching them to the spine, they are shaped to match the normal profile of the back. The rods are secured to the spine using numerous hooks. The rods act like an "inside brace" as they hold the spine in the straightened position while the bone heals solidly.



Anterior Spinal Instrumentation

To correct scoliosis in the lower portion of the spine, anterior instrumentation is used. The incision is usually made on the side of the chest below the rib cage. The discs between the vertebrae are removed, screws are placed into the vertebral bodies, and a rod is attached to the screws. Rotation of the rod straightens the spine.



Fusion

After the rods are in the back, pieces of bone (bone graft) are placed next to the rods. The bone is usually obtained from the top of the pelvis bone in the posterior spinal surgery and from a rib in the anterior surgery. Spinal fusion ultimately occurs when the bone heals solidly (making all of the vertebrae into one solid piece). Once this occurs, the rods have finished their job. However, because removal of the rods would require another major operation, they are usually left in the back.

Only the area of the spine that is “fused” will no longer grow. The other untouched parts of the spine will continue to grow in the areas above and below the fusion. Sometimes people worry about losing growth. Actually, straightening the back through surgery may add one half to one inch to your height.

Incision

All the “stitches” are under the skin. They dissolve so they don’t need to be removed. Small white strips of tape will also help hold the skin closed. The incision will be dark pink for a while, but the discoloration will fade over time. You must be careful to avoid excessive exposure to the sun in the first year after surgery in order to avoid a permanently dark scar. Use sun block, or a shirt, to cover the incision. Sometimes the scar may spread a little wider several months after the surgery.

Before Surgery

It is important to stay healthy and active prior to surgery. Any routine activities can be continued. A couple weeks before surgery, it’s a good idea to try to stay away from people who might be sick with the flu or colds. Eating well and getting plenty of rest is important.

Sunburn and insect bites can be uncomfortable any time, but especially uncomfortable when recovering from surgery, so take care to avoid these before your operation.

Some people are asked to donate their own blood prior to surgery. If this is the case, you should take an iron supplement beginning one week prior to the donation and continued until the time of surgery.

The school should be informed of your operation so they can plan homebound schooling, if needed. Most people miss three to four weeks of school while they are recovering.

Two weeks prior to surgery you should not take ibuprofen, aspirin, Aleve® or herbal supplements in order to avoid potential bleeding problems. You may take acetaminophen (Tylenol®), if needed, for a painful condition.

You should bring loose fitting clothes to the hospital (which button down the front), slippers and a bathrobe. Bring any special CDs or tapes that you enjoy. CD and tape players will be provided.

Admission

The day of admission is long because of all the numerous areas you must visit. Plan on this process taking all day.

Once admitted, you will meet and receive information from the Operating Room nurses and In-Patient Unit nurses. An anesthesiologist will also meet with you.

After Surgery

When you're discharged from the hospital, you will need to have an adult help you for the first two weeks. It usually takes about six weeks before you feel "normal" again. Try not to get discouraged if you find you don't feel very energetic. Gradually increasing your activities will help you feel better.

Activities:

Your doctor or nurse will review activities you will be permitted to do. Some of the activities you will be allowed to do are:

- walking (inside if the weather is bad)
- hair combing, brushing teeth, etc.
- climbing stairs
- riding in a car (if it is necessary to take a long car trip, stop about every two hours to stretch)

Some people are more comfortable standing or lying down, rather than sitting.

You should **avoid:**

- bending over
- twisting
- lifting more than five pounds

It is common for girls to start their menstrual period sometime during hospitalization (even if they have just finished one) due to the stress on the body from surgery. Periods usually return to normal within a few months.

Bathing:

Usually ten days to two weeks after the surgery, showers are permitted. It's best to have an adult there to help you for the first few times. The small pieces of white tape across the incision will eventually fall off on their own.

Pain Management:

It may be necessary to take a prescription pain medicine for a few days after getting home. It is important not to allow the pain to become intense before taking medication. Pain medicine can cause constipation, so be sure to drink plenty of fluids, eat fiber and use a mild laxative or glycerin suppository if needed.

School:

Most people are ready to go back to school two to four weeks after surgery. Some prefer to start by going back for half days, or find it necessary to lie down for a few minutes every couple of hours. Since there is a weight lifting restriction, you may be given a note requesting an extra set of books for home so all that you carry is a notebook. You will not be permitted to return to P.E. for several months.

Potential Problems:

If you ever need to have surgery or dental work done, be sure to tell your doctor or dentist that you have an implant in your back. Antibiotics are recommended prior to further surgery or dental procedures.

Do not have body piercing or tattooing. Ask your nurse or doctor to explain the dangers.

Occasionally, some problems occur. If they do, call the hospital anytime, day or night and ask to speak with the nurse.

Notify the nurse if any of the following occur:

- the incision is red, swollen, tender or opening
- the incision has drainage or bad odor
- pain, numbness, tingling in the arms or legs that wasn't there before you went home
- a fever develops of 101 or higher without any other apparent reason (i.e. cold, virus, etc.)

The numbers to call: (214) 559-5000 (Main Hospital Number) or (214) 559-7780
or Orthopedic Nurse Coordinator:

_____ (214) 559-_____

Further reading:

Neuwirth, Michael, MD. *The Scoliosis Sourcebook*, 2nd edition. New York: McGraw Hill, 2001.

Schommer, Nancy. *Stopping Scoliosis: The Complete Guide to Diagnosis and Treatment*, 2nd edition. New York: Avery Penguin Putnam, 2002.