

# CONNECTICUT NECK & BACK SPECIALISTS LLC

## PREPARING FOR SCOLIOSIS SURGERY

Learning that you need spine surgery can be a frightening realization, because all surgery carries risks as well as benefits. You've already taken a very important first step in choosing a surgeon and surgical team that you can trust. Here at Connecticut Neck & Back Specialists, our doctors are well respected and well trained. We specialize exclusively in spine and scoliosis surgery, and we pledge to use our skills and training to the best of our abilities. We will also educate you about your condition and the surgical plan, including associated risks, possible complications and expected outcomes. However, even the most successful and technically prepared surgical team cannot compensate for your important role in getting ready for surgery. Your physical and mental preparedness for the operation can have a major impact on surgical success and recovery. Depending on the amount of time you have before your surgery, there are many things that you can do to maximize your chance of a positive experience.

**What is scoliosis?** Scoliosis is an abnormal curve of the spine (backbone). Normally, the spine is straight. With scoliosis, the spine is crooked and curves to the side. If the spine is very crooked, the ribs or hips may stick out more on one side than the other side. Also, one shoulder may be lower than the other. Scoliosis may begin in childhood but often is not noticed until the teenage years. In most cases, the exact cause of scoliosis isn't known. It seems to run in some families. Scoliosis is more common in girls than in boys.

**Why do we have to treat scoliosis?** Small curves don't seem to cause any big problems later in life. But if the curve is big enough, it can cause problems with breathing or moving around. It could cause back pain. And it certainly could affect your child's appearance. A curve that is bigger than 50 degrees will continue to get bigger — slowly but surely. That's why we need to treat your scoliosis when your child is young. It's an investment in his or her future health.

**Will surgery be required?** Surgery may be recommended if your curve progresses beyond 45 to 50 degrees. Factors considered for recommending surgery include how mature your child's bones are and the curve's rate of progression.

**How much correction do you expect to achieve with surgery?** Depends on how flexible the curve is, which can be determined by having bending x-rays. On average we should expect 50- 70% correction of the curve.

**What type of operation is performed?** The operation is called a spinal fusion, which requires general anesthesia. During the operation, the bones in the back (the vertebra) are joined together with bone taken from the hip bone or pelvis (autogenous bone) or it may come from another person (allograft bone) by way of the bone bank. Metal rods are placed alongside of the spine to hold the bones in a straight position while the bone graft heals. The extra bone from the hip or pelvis helps the bones knit together.

A spinal fusion will not make the spine perfectly straight, although it will be straighter than it was before the operation. The main purpose of the operation is to stabilize the curve and prevent your scoliosis from getting worse.

Monitoring of the spinal nerves will also be done during your child's surgery. This test measures signals from nerves of the spinal cord. Electrodes with wires will be put on your child's wrist, knees and ankles. The wires are attached to a box, which sends stimulations to your child. It does not hurt, but may feel funny. Another set of electrodes and wires will be put on your child's scalp. These electrodes will be connected to a computer, which reads the signals from the spinal nerves.

**What happens during surgery?** An incision is made in the middle of the back. The muscles are moved to the side to expose the spine. The joints between the vertebrae are removed to loosen them up. The vertebrae are roughened up so that the body responds by producing new bone. The new bone eventually bridges the gaps between the vertebrae and makes them fuse together. Metal implants -- rods, screws, hooks or wires -- are put in to hold the spine still while the vertebrae fuse.

**What type of testing will need to be done prior to surgery?** You child will need to see their primary care physician (PCP) for medical clearance for surgery, which usually includes a physical exam, laboratory tests, Electrocardiogram (EKG) or chest x-ray and any other testing necessary. This appointment should be done no more than two weeks prior to surgery.

Pulmonary Function Test (PFT) may be required prior to surgery. This can be set up with a pulmonary specialist at Danbury Hospital and is usually done within one week of surgery.

Additional radiology testing such as an X-Ray, CT scan or an MRI may be required also. Your doctor will let you if any of this is necessary when you have decided to book surgery.

**Will blood need to be donated?** If needed, your doctor will recommend how many units are required to prepare for surgery. Usually it is 1-2 units of autologous donation (donating of own blood). If your child weighs at least 60 lbs., they may be eligible for blood donation. This will be determined if necessary by the doctor.

**How long will the incision be?** Incision length depends on the number of levels that need to be fused. We aim to keep incisions as small as possible and pride ourselves on very cosmetic skin closures.

**How long will the hospital stay be?** For adolescent patients, hospitalization generally lasts four to six days. When all of the goals to prepare a patient for independent care at home have not been reached, a hospital stay can extend to seven days.

**How much school will be missed?** Usually four to six weeks are needed to prepare a teenager for total independent activity at school. At home, rehabilitation is usually combined with home education so that students can keep up with their school work and studies. Your child's school can advise you on how to arrange for this service. Upon returning to school you child will be restricted from any physical activity, gym class, lifting, pushing, pulling, bending, twisting and the carrying of heavy backpacks/ book bags. We would recommend a bag w/ wheels if necessary.

**When can normal physical activities, including sports resume?** Your surgeon will tell you when your child or teenager can return to normal activities. Generally, activities are progressively increased over the first year after surgery. After this point most patients can re-enter most competitive sports. In fact, we encourage such activity.

## **Home Care following Scoliosis Surgery:**

### **Incision Care:**

- Check the incision twice daily for signs/symptoms of infection: Green/yellow discharge. Foul odor. Increase in pain at incision site, increased redness, opening of the incision, flu-like symptoms, or a Temperature above 101.5 degrees.
- Your bandages will be removed before you leave the hospital.
- If you have steri-strips on, leave them on after surgery. These will fall off on their own (do not pull them off); if they fall off early don't worry. Re-absorbable sutures are beneath the skin and will continue to support the incision while it heals.
- If you have staples or sutures please schedule a post-op appointment with your doctor to have these removed approximately two weeks after surgery.
- Keep your incision covered with a dressing until stitches or staples have been removed.
- Do not put anything on your incision
- Expect to have minimal swelling at the incision site.
- Despite great care, any incision can become infected. If you notice your wound becoming increasingly red, swollen, hot, or draining, please call your physician immediately.

### **Medications:**

- Take medications only as directed by your doctor.
- Because you have had a fusion, taking acetaminophen (Tylenol) is acceptable, but avoid ibuprofen (Advil, Motrin) or naproxen (Aleve) for three months.
- The use of a muscle relaxant to prevent muscle spasms or severe muscle tightness can be used. Please call your doctor if you are experiencing these symptoms; they may be able to prescribe something to help you.
- With the use of narcotic pain medications, simple constipation is common. Increasing your intake of fiber with a daily supplement such as Metamucil is often helpful. Avoid extended use of stimulant laxatives. *Please note: Medications are not refilled after 4:30pm, weekends, or holidays.*

### **Pain Management:**

- You will get a prescription for pain before you are discharged from the hospital. Try to wean yourself from the narcotics as soon as tolerated.
- Extra strength Tylenol may also help the pain and cause fewer side effects.

### **Activity:**

- Do not twist, bend or lift anything over 5 lbs.
- Activity, especially walking around your home, is encouraged. Try to do so at least 4 times daily.
- Do not do heavy housework, such as bed making, vacuuming or laundry.
- If using stairs is necessary, go slowly and use the handrail.
- No special exercises are necessary. Continue the abdominal and leg isometrics you were doing in the hospital.

**Diet:**

You can eat a regular diet.

**General Info:**

- Spine fusion patients cannot smoke for 6 months after surgery. You must also avoid nicotine products (smokeless tobacco, gum and patches) and avoid exposure to smoke from other smokers.
- Avoid sitting in chairs and sofas that are low to the ground and avoid sleeping on a mattress with the height not equal to that of your mid-thigh. This makes transfer in and out of bed easier.
- Do not drive until after we have seen you at your first post-op visit, unless otherwise approved by your physician. Riding in the car is acceptable, but long car rides (2 hrs.) are discouraged.
- An increased intake of water, 6 to 8 glasses per day, will help clear your body of anesthetics and excess pain medication.
- X-rays may be taken at regular intervals to assess the status of your recovery.
- Physical therapy, only if needed, will be initiated with your doctor at your post-op checkup.

**Call your doctor if:**

- Have drainage and/or odor from your wound.
- Have increased redness/swelling at the incision site, or unexplained increasing incisional pain not relieved by bed rest.
- Have fever greater than 101 with sweats or chills.
- Have new or unfamiliar pain or weakness in the arms or legs.
- Have difficulty with urination or bowel movements.

***In case of an emergency after business hours, please contact our answering service by calling 203-744-9700 and they will direct your questions to the physician on call OR go to the nearest emergency room.***