Your Scoliosis Surgery

At Penn State Milton S. Hershey Medical Center

PENNSTATE HERSHEY
Children's Hospital
1855

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Welcome to Penn State Hershey Children's Hospital at Penn State Hershey Medical Center.

This booklet provides you with information about scoliosis and the spinal fusion that has been recommended. It also explains what to expect before, during, and after the hospital stay.

This information is based on the typical experience. Because each person is unique, your experience may be slightly different.

We encourage you to write down the questions that you think of (as you review this material) in the space provided at the end of the booklet. Your care team will be happy to go over these questions at your next visit.

To begin, we want to make you as comfortable as possible with your upcoming operation. Be sure to note the following information:

_____

YOUR SURGERY DATE

_____

YOUR SURGEON

_____

YOUR EXPECTED LENGTH OF STAY

_____

YOUR PREOPERATIVE APPOINTMENT

Surgery scheduling phone number: 717-531-1580

_____

YOUR FIRST POSTOPERATIVE APPOINTMENT

Any additional questions?
Phone number: 717-531-5523

What is scoliosis?

Scoliosis is a lateral curving of the spine to the right or left.

There are different kinds of scoliosis. Some children are born with scoliosis and some develop it as a school-aged child. Sometimes we know the cause, but often we do not. Scoliosis is not contagious, i.e., you cannot catch it like a cold or the flu. There is no way to prevent scoliosis.

Many people with scoliosis do not need treatment. However, others do and may need an operation.

Why do some individuals with scoliosis need surgical treatment?

Large scoliosis curves often continue to increase, if not treated. Scoliosis curves can affect the appearance of your back and trunk. Some patients with large curves can have back pain as an adult. Sometimes lung function and stomach function can be affected. Scoliosis does not typically result in a decreased life span.

Spinal Fusion

A spinal fusion is an operation on the back bones, not the nerves of the spine or the spinal cord. The main purpose of this procedure is to stop the curve from getting worse, and to align the spine with the head over the tailbone. Usually the degree of scoliosis decreases with this procedure and the patient stands taller.

Before the operation

Before the operation you meet with several people.

Anesthesia clinic

You may be scheduled for an appointment in the anesthesia clinic (located in Suite 1300 of the University Physician Center on the Medical Center campus) to review your medical history and to have a physical exam and an anesthesia evaluation.

For this appointment, you need:

- **insurance information,**
- **a list of all medications and dosages, and**
- **a list of past surgeries.**

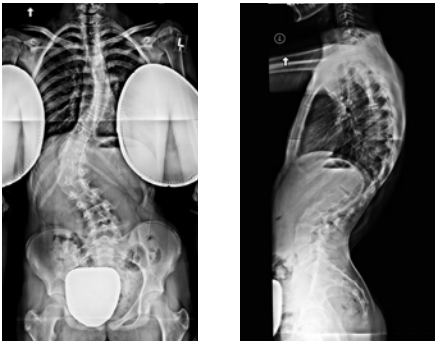
Healthy patients can been seen by anesthesiology the same day as the operation.

Pediatric bone and joint clinic

You will also be scheduled for a history and physical evaluation in the pediatric bone and joint outpatient office. At this visit, you will:

- **have an X-ray of your spine,**
- **discuss the hospital stay and pain control,**
- **practice log rolling,**
- **discuss giving a unit of blood before the operation,**
- **talk about returning to school after the operation.**

At this time, parent(s) also sign the surgical consent.



X-ray images before spine fusion surgery.

Scheduling

One business day before the operation, you will receive a telephone call from a nurse to advise when to report for surgery in the morning, and the time of the operation. If no one contacts you by 4:00 p.m. the day prior to the scheduled surgery, please call 717-531-3838 or toll-free at 1-800-243-1455 and ask to be transferred to extension 3838.

Food and drink

You may eat and drink as normal, until midnight the night prior to your surgery. After midnight, you cannot have any food or liquid. It is important your stomach is empty for the operation.

Packing for the hospital stay

When packing for the hospital, you should bring personal items, such as deodorant and a hairbrush, comfortable shoes or slippers with no slip soles, and comfortable, loose-fitting clothing, such as sweat pants and a T-shirt. You may also want to bring things that make you feel good—favorite stuffed animal, blanket, or a family photo.

Arriving at the Medical Center

The morning of the operation, you should report to the admissions desk in the lobby of the main entrance of the Medical Center.

You may feel nervous in anticipation of the operation and being in a strange place with new people. This is very normal. It is important to remember that someone (a friend or family member) may stay with you every step of the way, except in the operating room. There are also always nurses available to talk to, to answer questions, and to make you more comfortable. The nurses are happy to help in any way they can.

During the operation

The operation may last up to six hours. Throughout the surgery, your family waits in the surgical waiting area. They are kept informed of your progress.

During the operation, you will:

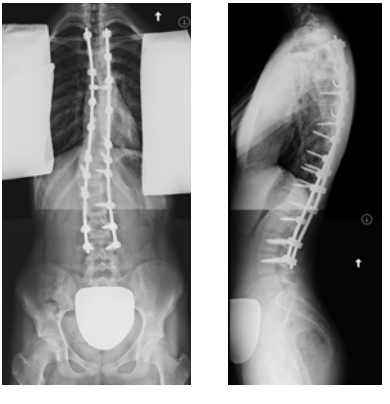
- **receive an antibiotic to prevent infection;**
- **be monitored for problems with spinal nerves;**
- **receive a Foley catheter to monitor urine output;**
- **have several intravenous (IV) lines started; and**
- **be monitored for blood loss.**

During the surgery, bone grafts (small pieces of bone) are placed on the vertebrae (the bones in the back) in the area of the curve. The pieces of bone and the vertebrae grow or fuse together to form a solid back bone that prevents the curve from getting worse.

The surgeon also attaches two metal rods to the spine during the operation. Wires, hooks, screws, and cages may also be used during the operation to attach the rods to the spine and support the spine. The rods correct and support the spine until the fusion is solid in six months.

Two types of surgery

There are two types of scoliosis surgery: anterior spine fusion and posterior spine fusion. The posterior spine fusion is done most frequently. A straight incision along the spine is used for this operation. A horizontal incision along the patient's side is used to do an anterior spine fusion. Patients often have chest tubes for several days after anterior spine fusions. The chest tube keeps the lungs expanded.



X-ray images after spine fusion surgery.

After the operation

After the operation, you go to the post anesthesia care unit (PACU), and then to your room in the Children's Hospital. A parent or family member can stay with you throughout recovery.

The routine

Following the operation, you and your nurse will start a routine: turning in bed, doing breathing exercises by using an incentive spirometer, and checking vital signs (temperature, pulse, breathing, and blood pressure).

When turning in bed you need to log roll or keep your shoulders over the pelvis (hip bones). The day after the procedure, you will sit on the edge of the bed. The second day after the procedure you will get out of bed. By the third day after the operation, you should be able to walk to the bathroom. This is typically the day the catheter is removed.

Nourishment

During the spine fusion operation, the stomach also goes to sleep. At first, the intravenous fluids (IV) provide all the nourishment needed. When the stomach starts to wake-up two to three days after the operation, you slowly begin to drink (starting with clear liquids first) and eat.

Pain control

Initially following the operation, pain is controlled through the IV medication. The day after the operation you are typically awake enough to give yourself your own pain medicine by using a patient controlled analgesia pump (PCA). This is administered by pushing a button on a device held in your hand. Rules for using the pump:

- **You may push the button when your back starts to hurt.**
- **You may push the button as many times as needed.**
- **Only you, the patient, are allowed to push the button.**

The PCA is used until you begin to eat and drink again, when the pain medication may be taken by mouth.

Mood swings

Sometimes teenagers experience "mood swings" several days after the operation. Although you are healing and feeling better, your body and emotions are reacting to the operation. You may feel cranky or sad, or feel like crying. Mood swings usually last a day and mean that you are on the road to recovery.

Going home

To go home following this operation, you should:

- **be eating a regular diet;**
- **be walking in the hallway;**
- **have a normal temperature;**
- **be on medicine by mouth for pain; and**
- **be going to the bathroom for urination and bowel movements.**

When going home, there are several limitations:

- **No twisting or rotating the spine.**
- **No running or jumping.**
- **No lifting more than ten pounds.**
- **No physical education in school.**

After being home, you can gradually return to normal activities. It will take time to get strength back. You should begin doing things slowly, and rest when tired. Feeling tired is normal, however you should not stay in bed all day. The body needs activity to get back in shape and lying around is not good for it. Increasing activity not only helps your back to heal, but it also helps you to feel better. The medical team encourages you to take walks outside, if the weather allows.

Returning to being a student

About two weeks after the operation, you can start home-bound tutoring for school. It is important to not fall too far behind in school studies.

Helpful websites on scoliosis

aaos.org

(The American Academy of Orthopaedic Surgeons)

Contains great information on scoliosis and spine fusion in the patient education page.

scoliosis.org

(National Scoliosis Foundation)

Excellent information about scoliosis in all ages and listings of links to related sites.

srs.org

(Scoliosis Research Society)

Offers reliable information by the experts on different types of scoliosis and treatments.

What are your Questions?

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For more information, contact
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