Why does my child need this surgery?

Several kinds of spinal curvatures can be treated with posterior spine fusion surgery. These include scoliosis, kyphosis and lordosis. If your child has one of these curvatures and it has progressed so that they can no longer sit comfortably, surgery can make a big difference. It is also recommended for children whose spinal curvature is expected to become severe. Braces can help children with milder curvature sit more comfortably, but braces cannot stop spinal curvature from worsening as a child grows. Eventually, it will be impossible to brace your child comfortably.

If you decide against surgery, one day your child may not be able to sit upright. This will make it hard to leave the house and be part of the community. It is your choice, but also our responsibility to make sure you understand why we have recommended posterior spine fusion.

What happens in this surgery?

The surgeon will roughen the boney surfaces of the spine and remove the joints. The surgeon will then do bone grafts to fill in the spaces and wire a metal rod to the spinal column in the spine’s new, straight position. After several months, the small bones of the spine (vertebrae) will fuse to become one long, straightened bone.

Since the spine can no longer bend, the correction lasts a lifetime. The rod we use most often in surgeries like this is called a unit rod. Wired in place along the spine, the unit rod helps straighten the curvature and supports the spine as the small bones fuse. An alternate method is using screws and rods to hold the spine while it fuses.

Children with very severe curvatures may also need a procedure to loosen the spine from the front before the back of the spine is treated. This is called anterior release surgery. It is a separate, smaller procedure that is seldom needed if fusion surgery is done before the curvature becomes too severe or stiff.

What happens after surgery?

The unit rod is strong enough to do all the work, so your child will not need a cast. After surgery, your child will be transferred to the Intensive Care Unit (ICU) and remain there for two to seven days. Many children who have this surgery are placed on a ventilator for comfort during those first few days in ICU.

Once your child is stable, they will move to a regular hospital room for about 10 days. There, your child will begin physical therapy. For example, children who are not walkers will gradually learn to sit in their wheelchair. Children who walked before surgery will learn to stand and take assisted steps. During this stage of recovery, we keep careful track of the patient’s general health, especially their nutrition.

Will my child have pain?

Yes, your child will need pain relievers and muscle relaxants at first. Our staff is trained to help make patients as comfortable as possible. Once you go home, please call the office if pain is a problem or if the pain medication your child’s doctor prescribed causes side effects.

Will my child be able to walk and do other activities once we go home?

Most children who need this surgery did not walk before surgery. If your child was able to walk, it will probably take some time before they can walk as they did before. The physical therapist will encourage walkers to practice while they are still in the hospital.
Will my child be able to ride in the car?
In the beginning, your child will tolerate short car rides only. Avoid bumpy roads that cause discomfort. Once the spine has healed, they can ride in the car as long as they are comfortable, with no restrictions.

Will my child need physical therapy?
Children who do not walk will probably not need physical therapy after they leave the hospital. They should continue to move the arms and legs gently within the normal range of motion. Children who walked prior to their surgery will probably need physical therapy for a while. The goal is to help them regain and strengthen their walking skills.

A social worker will help you arrange therapy. You can help by asking your insurance provider in advance about your physical therapy coverage. Please try to do this before surgery if you can.

When will my child need to return to see the doctor or get X-rays?
The first return visit is usually three to four weeks after your child leaves the hospital. X-rays will be taken at this visit. The next visit is about two months later. This time, x-rays may or may not be needed.

The third visit is about four months later, or roughly seven months after surgery. After this visit, your child will receive a routine checkup every six months, with X-rays if the doctor orders them.

Will my child need to be lifted or handled differently after a spine fusion?
Your child will no longer be able to bend through the back, but will still bend through the hips. You may need to position your arms differently when you lift your child now. In general, the surgery should make your child easier to handle. It will certainly be easier to place them in a seated position.

When will my child be able to return to school and the school bus?
It will take some time and each child recovers differently. Children usually return home from the hospital about two weeks after their spine fusion. For another few weeks, they may have problems with eating or sitting for long periods of time. You should use your instincts, knowing that there are no medical restrictions on returning to school. As soon as your child feels ready, let them try it. Maybe half days will work better at first. Some children actually do much better after they go back to school. School and friends can be good distractions from discomfort during healing.

On the other hand, bouncing up and down on a school bus can be very uncomfortable, especially if the drive is long. So, while it probably won’t damage the spine or rod, a long school bus ride may not work for your child. If you can find another way to get them there, it might be better for the short term.

How long will it be until my child has completely recovered?
This also varies by child. If there are no complications, such as problems with sleeping and eating or an infection, most children recover in six months. But this is not always the case.

Will this surgery ever need to be repeated?
This is very unlikely. Once the spine is solidly fused, you can expect a permanent correction.