

Scoliosis

(sko-lee-O-sis)

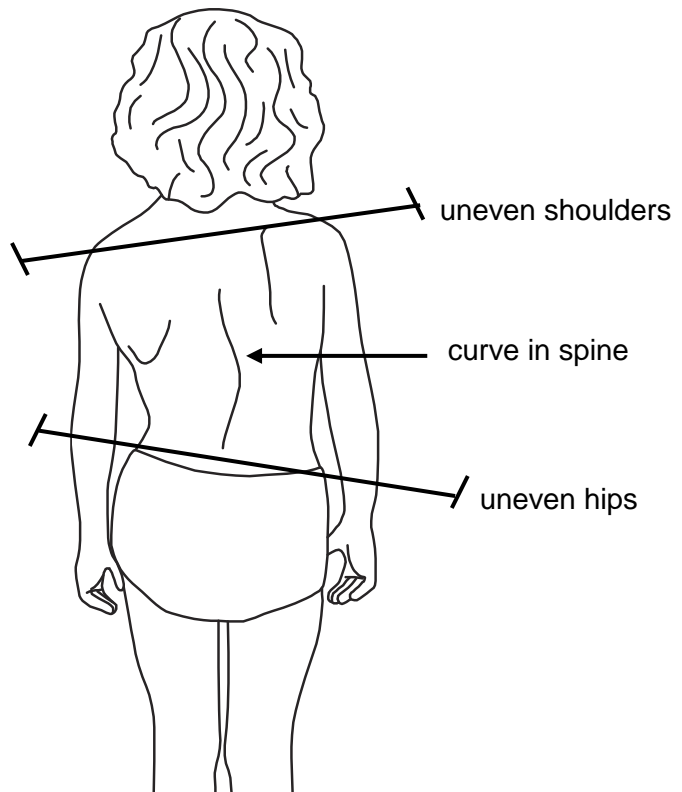
What is scoliosis?

Scoliosis is the medical word for an abnormal curve of the spine. Although everyone's spine has natural curves from front to back, a child with scoliosis has curves to the side as well. The problem can occur anywhere along the back.

In most cases, there is no known cause for the abnormal curve. This is called idiopathic (id-ee-o-PATH-ic) scoliosis.

Children with scoliosis may have uneven shoulders or hips, and one shoulder blade may stick out more than the other. The changes in the back may be more noticeable when the child is bending over.

Children with neuromuscular disorders may also have scoliosis. With this group of children, weakened muscles are unable to support the spine in the normal position, and abnormal curves develop.



Surgery may be recommended to correct scoliosis by straightening the abnormal curves.

What happens before surgery?

Before surgery, your child will have an appointment in the Pre-op Clinic. A Child Life Specialist and a nurse will help you and your child prepare for surgery. Your child will also see an Anesthesiologist at this appointment. This is the doctor who will give your child medication called anesthetic, so your child will sleep during surgery. You will be given a checklist of instructions to follow for the day before surgery.

At this appointment, please let the Anesthesiologist know if your child has anxiety, problems with sleeping, or has had ongoing pain.

You will also be told when to bring your child to the hospital at this appointment.

It may help your child to be more comfortable during their hospital stay if you bring a “comfort kit”. Have your child pick a few of their favourite items and activities from home; for example, a favourite blanket, music, book, tablet.

The day of surgery

On the day of surgery, you and your child will come to the Same Day Surgery Unit. Here, your child will change into hospital pajamas. When your child is changed, a nurse may start an intravenous (IV) or it may be started by the operating room staff. The IV will be used to give your child fluids and medication before, during and after the surgery.

When your child is called to the operating room (OR), one caregiver will be invited to go with your child. Your child will be greeted in the OR lobby by the OR staff when you arrive. You may wait there with your child while the surgical team makes final preparations.

When the team is ready, your child will be taken into the operating room. It may be possible for one caregiver to go with your child into the operating room, while your child is being settled. To keep the operating room very clean you will be asked to change into hospital clothing (scrubs or a white jumpsuit) which will be provided by the staff in the Same Day Surgery Unit.

What happens in the operating room?

After being greeted by the operating room staff:

- If not already in place, an IV will be started in your child's arm or hand to give fluids and medications
- Your child will be given a general anesthetic (medication) so that they will be asleep during surgery

When your child is asleep:

Another IV, called a central line, may be inserted into your child's neck.

An additional IV, called an arterial line, may be inserted into your child's wrist to measure blood pressure and take blood samples.

A breathing tube will be placed in your child's throat. A tube called a catheter will be put into your child's bladder to drain urine.

The surgeon will attach one or two rods to the spine to straighten it. The surgeon will insert the rods through an incision in your child's back or side, depending on where the abnormal curve is located.

With more complex surgeries, a chest tube is placed between the lung and its covering to help inflate the lung and collect fluid.

When the surgery is complete, the incision is closed and covered with a long dressing.

This operation usually takes about 8 hours. Each child's surgery is different so do not be alarmed if your child's surgery takes longer.

What happens after surgery?

After surgery, the surgeon will come to the waiting area to speak with you.

Your child will go from the operating room to the Pediatric Intensive Care Unit (PICU). This is located on the third floor in the yellow section.

Here, your child will be closely monitored. Your child may still have a breathing tube in place, until he or she can breathe on their own.

You may notice that your child's face is puffy. This puffiness happens because your child was lying on their stomach for many hours during the surgery, and also because they received IV fluids during surgery. This puffiness will gradually improve.

Your child will stay in the PICU until they are moved to the pediatric ward.

How will my child's pain be relieved?

Pain control is very important for your child's recovery. You know your child best so please let us know whether the medications and comfort measures are effective.

We will assess your child's pain frequently and provide medication. Relieving or controlling the pain can promote healing. Our Acute Pain Service (APS) team will also help manage your child's pain.

Right after surgery, your child's pain will likely be managed with IV pain medication. Your doctor will decide how your child is best to receive pain medication. Many will receive Patient Controlled Anaesthesia (PCA). You can read our education document on PCA to find out more details.

Eventually your child will come off IV pain medication and begin using oral medications to manage their pain.

Remember, changing positions in bed, getting out of bed with assistance, deep breathing, and using items from your child's "comfort kit" may all help to control your child's pain.

What can my child eat and drink?

When it is safe for your child to drink, they will be offered fluids. When your child can tolerate fluids, they will gradually return to their usual diet.

Your child may become constipated due to being less active and taking pain medications. To prevent constipation, have your child drink plenty of fluids and eat foods high in fibre. Foods high in fibre are fruits, vegetables, and whole grain breads and cereals. Your child will require daily medications until they have a large bowel movement.

May I stay with my child?

We encourage parents to spend as much time as possible with their child. One parent may stay overnight in your child's room. Out of town families may also be able to reserve a room at the nearby Ronald McDonald House, which is about a 5 minute walk away from the hospital.

How do I care for the incision?

The nurses will check the dressing over the incision and change it if necessary.

Your child may be able to have a shower while in hospital. Your child's nurse will let you know when this may happen.

What activity can my child do?

It is important that your child moves regularly after surgery to prevent complications and help your child have less pain. This will be coordinated with the delivery of pain medication.

At first, the nurse or physiotherapist will help your child get out of bed. Your child may be sitting up in a chair as early as the day after surgery.

If your child was able to walk before surgery, the physiotherapist will work with you and your child to walk after surgery.

Your child will need to limit any bending of their spine until this movement is cleared by their surgeon.

Some children return to school part-time about 3 to 4 weeks after surgery, other children may be off school for 4 to 6 weeks and then return full-time. Your surgeon will let you know when is right for your child. To help the bones heal completely, your child may need to limit some activities for 6 to 12 months. Check with your child's surgeon before your child participates in physical activities or sports.

When can my child go home?

The usual hospital stay is 5 to 10 days depending on the type of scoliosis surgery your child has undergone.

The decision to go home will depend on:

- How well your child is drinking and eating
- How well your child is moving around
- How well your child's pain is controlled
- If your child is having bowel movements

What plans are made when my child goes home?

During your child's hospital stay, the health care team will help you learn about your child's care. Please ask them any questions you may have.

An appointment will be booked for your child to see their surgeon approximately 2 weeks after going home.

What if I have questions?

Call 905-521-2100 and ask for your surgeon's office if your child experiences any of the following:

- your child feels ill or has a fever (a temperature higher than 37.7°C or 99.9°F)
- redness, swelling around the incision, bleeding or leaking from the incision that does not stop
- pain that does not get better or is getting worse
- numbness, tingling, or weakness in arms or legs
- change in bowel or bladder control
- vomiting that does not stop or prevents your child from eating or drinking

After hours, or on week-ends, call paging **905-521-5030** and ask for the Orthopedic Surgeon On-Call at McMaster University Medical Centre.

Take your child to the nearest hospital Emergency Department if you are concerned about your child's health and cannot reach your surgeon. If it is an emergency, call 911.