

Preparing for Your Posterior Spinal Fusion Surgery

**Department of Pediatrics
Section of Pediatric Orthopaedic Surgery**



**University of Michigan
C.S. Mott Children's Hospital**

Table of Contents:

How will I prepare for surgery?	- 3 -
Instructions for the day before surgery:	- 3 -
What do I bring to the hospital?	- 3 -
What will happen on the day of surgery?	- 4 -
Before the surgery	- 4 -
During the surgery	- 4 -
After surgery	- 4 -
What can I expect during the hospital stay?	- 5 -
What will my diet be like right after surgery?	- 6 -
How will I turn and move after surgery?	- 6 -
How will you control my pain after surgery?	- 7 -
What types of pain typically occur with spinal fusion surgery?	- 7 -
Tell us what you feel	- 8 -
What will the team do to help control my pain?	- 8 -
What can I do to help get comfortable?	- 9 -
Making a plan for pain management	- 10 -
What is the role of parents and caregivers?	- 11 -
How will I prepare for my child's return home?	- 11 -
Planning for school	- 12 -
Planning for work	- 12 -
12 west information	- 13 -

How will I prepare for surgery?

Instructions for the day before surgery:

You will get a call the afternoon before surgery from a nurse who works in the pre-operation area.

- Calls for Monday surgeries are made the Friday afternoon before surgery.
- You will receive instructions on when and where to arrive, when to stop food and fluids, and what medications can be taken on the day of surgery.
- If you do not get a call by 5 pm, you must call 877-368-1316.
- On the morning of surgery, check in at the pre-op area on the 4th floor of the C.S. Mott Children's Hospital.
- Take a shower the night before and morning of surgery at home using the antibacterial scrub you received.

Parents and caregivers have a major role in helping you prepare for surgery. Please ask them to read the note on page 11.

What do I bring to the hospital?

Bring your toiletries such as:

- toothbrush
- toothpaste
- hairbrush
- deodorant
- any other personal care items you may prefer.
- do not bring any valuables and leave jewelry at home.
- you will mainly use hospital gowns but may want to have clean underwear and a comfortable outfit for your trip home.
- comfortable shoes will be best when you are up out of bed and doing physical therapy.

.

What will happen on the day of surgery?

Before the Surgery

The anesthesiologist (a physician who has training in giving anesthesia) will use special medication that will make you sleep through the entire surgery. You will not wake up until the surgery is over.

During the Surgery

The surgery usually takes 4-8 hours to complete. As you probably already know, your surgeon will place 1-2 rods in your back to straighten your spine. The rods will be held in place with screws, hooks and wire. The surgeon will also place bone graft over your spine to stimulate the process of bone fusion which will take several months to be complete.

We will monitor you closely during the surgery and watch for any changes in your nerves that control movement and sensation. This is a safety measure to limit the chance of nerve injury during surgery. You will have monitor leads on your abdomen, arms and legs so we can monitor your nerve function. We will remove the leads after surgery.

After Surgery

- Your surgeon will talk to your family in the family waiting room when surgery is done.
- Around this time, you will be moved to the Recovery Room where you will wake up. We will be getting you more comfortable with the use of your pain medication.
- When you are awake, your parents or guardians will be allowed to be with you in the Recovery Room. After 1-2 hours in the Recovery Room, you will be moved to the 12th floor General Care Unit. The nurses and medical teams will work to keep you as comfortable as possible.

- You will start working with Physical Therapy the morning after surgery to get up and out of bed. Most patients are feeling better, eating and moving around well, and able to go home 3 days after surgery.

What can I expect during the hospital stay?

You may notice a few things that are used to help with your care after surgery.

These include:

Intravenous (IV) Line

This is used to give you fluid until you are able to drink enough liquids and as a route to give you medicines so you don't have to get shots.

Drain

This is a thin tube placed near the incision to collect blood drainage so your bandages don't have to be changed too often. The drain is usually removed on Day 2.

Foley catheter

This is a thin tube placed into your bladder when you are asleep to collect urine so you don't have to get up to go to the bathroom. This catheter is usually removed on Day 1 or Day 2.

Bandage

There will be a long bandage taped over your spine incision. It is usually changed before you go home. You will have dissolving sutures under the skin with steri-strips on the skin.

Incentive Spirometer

This is a very important, hand held device that you breathe into to get your lungs breathing deeply. You will do this 10 times every hour while awake to prevent pneumonia.

What will my diet be like right after surgery?

After surgery your stomach and gastrointestinal system will not be fully awake and functioning. You will start having ice chips and sips of water after surgery. As your stomach tolerates liquids, we will slowly advance your diet back to solid food.

How will I turn and move after surgery?

We will help you change your position in bed every 2 hours. This is important to keep you more comfortable and to prevent pressure on your skin. The physical therapist will start working with you the first day after surgery to get you moving.

How will you control my pain after surgery?

We understand that you might be worried about having spinal fusion surgery and having pain. Your doctors, nurses, physical therapist, child life specialist and the Acute Pain Service will be working together as a team to make you as comfortable as possible during your hospital stay. We may not be able to get rid of all pain from the surgery because each person feels and experiences pain in their own way. You are an important part of this team and will need to tell us what you are feeling and what is working.

The following information will help prepare you for recovery from spinal fusion surgery. The information will cover the types of pain you might have, what you need to tell us, how your pain will be managed, and how your family members can help you manage your pain.

What types of pain typically occur with Spinal Fusion Surgery?

There are three types of pain that may occur after surgery:

- **Incisional Pain** comes from operating on the bones and muscles. This pain can be described as throbbing, beating, pounding, stabbing, sharp, intense, heavy, and sore. This pain is treated by using pain medicine such as Morphine, Oxycodone, Toradol and Tylenol®.
- **Muscle Spasms** come from stretching your muscles and lack of movement. They are very common after this surgery. Spasms are often described as cramping, squeezing, and pinching. This pain is treated with a muscle relaxant such as Diazepam (Valium).
- **Generalized Pain and Discomfort** comes from having a long surgery, lying in bed, not eating and having tubes and needle sticks. Although these types of discomfort may be milder than the surgery pain, they often cause frustration and interrupt your rest. These pains can be treated with a change in position, massage and other non-drug therapies.

Tell us what you feel

One of most important steps in treating your pain is to tell your team members what type of pain and discomfort you are feeling and what things are working to make you comfortable. One of the best approaches for measuring your pain is to tell us where your pain is and give us some words that describe it. We will ask you to use a pain assessment scale so that you can tell us how big or small the pain is that you are feeling. Two pain assessment tools we frequently use with older children and adolescents are the number scale and the word scale.

1-10 Number Scale: 0= No Pain . . . 10= Worst Pain Ever

Word Scale: No Hurt, A Little Hurt, Medium Hurt, Big Hurt

We also want you to tell us about other discomforts and pain such nausea, being cold, shivering, not sleeping and other things that are bothering you. We need to consider all of the things that are painful and uncomfortable so that a plan can be made to help you.

Be sure to tell us about any pain that does not go down or any new pains or discomfort. Also tell us if the pain medication is working or if you need more medication.

What will the team do to help control my pain?

You team will give you medication and will provide other measures to keep you comfortable. You will receive opioids (powerful pain reducing medications such as morphine) and non-opioid pain medication for your pain and we may suggest other medication and therapies to make you comfortable. There are a few special ways to deliver pain medication with spinal fusion surgery. They are called Spinal Therapy, Epidural Therapy and Patient Controlled Analgesia (PCA).

Spinal Therapy is an injection of an opioid medication into the space around the spinal cord. You will receive it while you are asleep. It is given one time at the beginning of surgery and lasts for several hours, into the night.

Epidural Therapy is the placement of a small catheter (like an IV tube) into the epidural space, which is located just outside of the spine. The catheter delivers a low dose opioid as a continuous infusion.

PCA is a pump that gives opioids through the IV line. The PCA pump is programmed to give a safe dose of medicine based on your weight and condition. It is also set to give a fixed amount over a given time period. The pump can be adjusted to keep you comfortable and safe.

Oral Medications Once you are able to tolerate a clear liquid diet you can start taking oral pain medication. This varies from patient to patient but is typically the first or second day after surgery. Starting an oral opioid may seem like less pain control but doses can be adjusted to provide good coverage of pain. This is the first step in making a plan for pain control at home. These medications are typically used on a timed schedule along with non-opioid drugs such as Tylenol and Ibuprofen which can help decrease pain and generalized aches.

Non-drug therapies can be effective for mild to moderate pain and to boost the pain-relief effects of drugs. Techniques such as deep breathing and massage are easy to use and your family members can be your coach.

What can I do to help get comfortable?

You can do many things to help with your pain. Moving your legs and simple exercises such as deep breathing and stretching your fingers and feet will help your circulation and comfort.

- **Deep Breathing** helps to relax and relieve pain. It is also very helpful for changing positions in bed or when you get up with physical therapy. Use the 3 breaths and move technique: Take 2 slow breaths in and out. On the 3rd breath when you are blowing out, change your position. When you blow out, you help your muscles relax.
- **Distraction** is an effective way to focus your mind away from the pain and thinking about getting better and stronger. Music, deep breathing, computer or video games, and TV are all useful distractions.
- **Gentle touch and frequent repositioning** can help soothe pain. Ask your parent or family member to gently massage your hands or feet. Turning to your side and moving your legs and arms will also help.

Making a plan for pain management

- Prior to coming to the hospital for surgery have a conversation with your parents about your pain expectations. Set pain goals and realize that it is impossible to have no pain.
- Discuss with your family members how they might help you with your pain and comfort.
- Tell your team what you are thinking, feeling and what you would like to do so that we can work together to provide pain management and comfort.
- The Child and Family Life Department recommends that you build your own coping kit to bring to the hospital. Some ideas include a CD player or iPod with headphones, movies, favorite pictures, drawing and writing supplies.

What is the role of parents and caregivers?

Your child will be undergoing surgery to stabilize his or her spine curvature. This may be a very stressful time for your child and he or she will need a lot of support during the hospitalization and at home afterwards. This may be your child's first surgical experience and it can be scary for him or her. The spinal fusion is a big surgery and having you close by can be helpful and comforting.

It will be very helpful for you to work well with your son or daughter's caregivers. Be sure to communicate your concerns and questions. You know your child best and know how your child reacts to pain and stress. You can guide the staff to interpret how your child is doing. You can also help coach your child through the various tasks needed for your child's care if you understand what is expected.

Here are some important things you can do to help your child:

- Help your child with relaxation techniques such as deep breathing or distraction when they are moved or have other uncomfortable treatments. Every child reacts differently to pain and stress. Some want to be left alone and do not want to be bothered.
- Explain to your child that they will be closely watched to be sure everything goes well after surgery. This will mean that nurses and other staff will need to check on them frequently, even during the night.
- Help your child understand that turning or changing positions is very important for their recovery. It may seem that it is difficult and too painful to do, so it is important that you are aware of this and can help support them through the recovery process.

How will I prepare for my child's return home?

It is helpful to plan ahead for your child's return home after discharge from the hospital. Plan to have a family member or friend at home at all times to help your child for the first couple weeks. Many families will have their child stay in

a bedroom that they can easily get into and that is near the bathroom. Sometimes families with bedrooms on the second floor will chose to temporarily set up a bedroom on the main floor to limit the trips up and down the stairs. Let us know if there are challenges with the set-up of your house so we can make suggestions to make things easier.

Planning for school

Most kids will be away from school for about 4 weeks. This includes the time for surgery, hospital-stay and recovery at home. Talk to your child's school to find out if they can arrange for a homebound teacher. When your child does return to school, they will not be able to participate in physical education classes for several weeks. Talk with your school to arrange for a second set of books to keep at home. This is necessary to limit the weight carried in the backpack. Let us know if you need any paperwork from your doctor for any special arrangements.

Planning for work

Parents often plan to take time off work to be at home to care for their child after surgery. Please give us any needed paperwork for your employer well in advance of the scheduled surgery.

12 West Mott Information

What is the address and contact information for the unit where I will be staying?

- University of Michigan
C.S. Mott Children's Hospital
1540 East Hospital Drive
12 West + (patient room number) Ann Arbor, Michigan 48109
Unit phone number: (734) 764-7112

Cell Phones

Use of cell phones is allowed but it must be at least one foot away from medical devices. Two way radios or push-to-talk functions are not allowed. You may use the in-room phone for outgoing local calls and for receiving incoming calls. Dial 97 to get an outside line. The phone does not ring through to the room between 10 p.m. and 6:30 a.m.

Safety and Security

Id Bands are required to be on patients at all times.

Hugs Tag (infant security system) are to be removed only by hospital staff members. Notify the nurse if you want to take your child wearing a tag off the unit.

Personal Belongings

We advise against leaving valuable items (such as laptops, game systems, DVDs, cell phones, purses/wallets) unattended at any time. If you cannot keep valuable items with you, secure them in your vehicle or send them home. Please note that the Health System cannot be responsible for lost or stolen items.

Guest Services Desk

When you enter the building and our floor our Guest Services Specialists will greet you at the reception desk any time day or night. These members of our

staff screen visitors and provide badges. They can help you find your way and validate parking.

Visiting and Rooming In

Visiting hours are 9 a.m.-9 p.m.

To maintain important emotional and social connections, we encourage our patients' ongoing interaction with family and friends. Parents and guardians are welcome to stay with their child. We encourage visitors to come later in the afternoon or early evening since your child may be busy with nursing procedures, therapies, school and other appointments during the day. Parents: for your child's safety, let your nurse know when you are leaving the unit.

- **Rooming In:** 1-2 parents or guardians can sleep in the patient room. Please do not sleep in the bed with your child, on the floor or in the Family Lounge. Parents staying at the bedside need to bring their own toiletries and clothing needed during the stay.
- **Visiting:** All visitors (including parents) must have visitor tags. Family/visitors under the age of 18 are not permitted to stay overnight in the hospital. Visitors under the age of 16 must be supervised at all times.
- Anyone who enters your room must either be hospital staff or be someone you know. If you have questions or concerns about people entering your room, please push your call button.

Eating

When your child arrives on the unit, they may have certain diet restrictions. The nursing staff asks that you do not give your child anything to eat or drink before your nurse explains your child's diet and provides you with the proper menu.

- Patients will order their food through our Room Service program which is available from 6:30 a.m. to 8:00 p.m. The phone number is 2-FOOD (2-3663). Afterhours, patients can utilize the nourishment room for light snacks.

- Family members can also order a guest tray for a nominal fee. Check the restaurant icon on the Get Well Network for details about our Room Service and other food options for family and visitors.

Family Space & Room Decor

Family space is nearest the window. Drawers and cupboards are provided for personal belongings. To help us keep our unit clean, we ask that you not use tape or thumbtacks on our walls. In order for housekeeping to clean your child's room, the area should be kept free of clutter.

Bedside Medical Rounds

Most of our medical teams conduct bedside rounds. They may include doctors, nurses, physical therapists, dietitians and other health professionals. Parents are welcome to participate and provide input.

Amenities

- **Nourishment room:** There is coffee and tea for family members. To ensure that food items are available for patients throughout the day and night, food, milk, juices and formula are for patients only. Children under 12 years of age are not to be unattended for safety reasons.
- **Family Lounge:** This space is shared by family members and visitors from both floor units: 12 East & 12 West. Some community groups use this space to sponsor events for our families. The Laundry room is also located here. Washers, dryers and detergent are available for patient use.
- **Child Life (Activity) Room & School Room** hours are posted on their doors.
- **Lactation Room** is available.
- **Family Resource Center-** located on the 2nd level near the gift shop
- **Exercise Room-** located on the 7th level, available for inpatient's family members (over 18 years old).
- **Michigan Game Day Experience-** located on 8th level.

What should I check for when going home?

We highly recommend that you double check for all of your belongings, including medications, when you are packing to go home. If you lose anything during your stay, please call the Lost & Found office at (734) 936-7890 (or 6-7890 from an in house phone).

Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Reviewed By: MaryAnn Hayes MS, RN, OCNS-C

Patient Education by [University of Michigan Health System](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#). Last Revised 11/2016