

## What happens before surgery?

Your child is having pectus repair surgery. Special directions, tests and appointments will be needed before surgery. They include:

- Directions on when your child will need to stop eating and drinking the night before surgery. **This is very important. If directions are not followed, surgery may be cancelled.**
- Washing with a special soap the night before surgery. This is one way you can help prevent infection after surgery.
- Medicine to help with pooping, will be started 3 days before surgery. A special sheet with directions will be sent to you.
- An appointment in the Pre-op Anesthesia Clinic may be needed. Blood tests may be needed.
- More information about preparing your child for surgery can be found on the Children's Wisconsin website <https://childrenswi.org/health-information/preparing-for-surgery>

## What happens on the day of surgery?

- When you come to the hospital, stop at a Welcome desk to get a badge. They will direct you to the day surgery area. A member of the surgery team will meet with you to answer any questions.
- You will go with your child to the holding room. You will meet with the doctor who will give your child medicine to help them sleep through the surgery. This doctor is called an anesthesiologist. This doctor will also tell you the ways your child's pain will be treated after surgery.
- Your child will be taken to the operating room. An IV will be started to give medicines and fluids. A PCA (Patient Controlled Analgesia) will be started for pain control.

**Nuss procedure:** Small cuts, called incisions, are made in the sides and sometimes the front of the chest. This is where the steel bar will go under the breastbone (sternum) and skin to push out the sunken area of the chest. The bar stays in for 2 to 3 years. When it is time for the bar to be removed, it will be done with same day surgery.

**Ravitch procedure:** A cut is made in the chest. Abnormal tissue is taken out which lets the sternum move to a more normal position. Usually a chest drain is left in place after surgery for a few days. It is usually removed before your child goes home.

## What happens after surgery?

- After surgery, your child will go to the recovery room and then to an inpatient unit.
- If your child had the Nuss Procedure: Your child must not roll on their side, twist or side bend/flex at the waist for 6 weeks after the surgery. This will help the bar and chest stay in a good position.
- Your child will have some pain after surgery. We will do everything we can to keep your child as comfortable as possible. We will use IV and oral medication, and non-medication pain management. The Pain Management Team will see your child each day. They are available 24 hours a day if needed.

Day of surgery	First Day after surgery	Second Day after Surgery	Goals to go home
<p>Your child will:</p> <ul style="list-style-type: none"> <li>• be able to sit up in bed or at the edge of bed.</li> <li>• be able to get out of bed 6 hours after coming to the unit. A nurse will help with this.</li> <li>• be able to use the bathroom</li> <li>• be able to eat and drink.</li> <li>• have pain control using IV medications and medications by mouth</li> <li>• start medicines to prevent constipation.</li> <li>• learn breathing exercises with the incentive spirometer (IS), take deep breaths to keep the lungs open. Use it in both the hospital and at home.</li> <li>• Medicines may be used to help with any post op symptoms like nausea.</li> </ul>	<p>Your child will:</p> <ul style="list-style-type: none"> <li>• Continue eating, drinking and using the bathroom</li> <li>• Continue to increase physical activity with the nurses and therapists. Physical and Occupational Therapy (PT/OT) will teach your child how to move and do their self care.</li> <li>• Increase activity by walking in the hallway up to 4 times per day and sit in chair 3 times per day.</li> <li>• Continue oral pain medicines which include Tylenol, Ibuprofen, Oxycodone, and Gabapentin.</li> <li>• Continue medicines to prevent constipation.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to increase physical activity.</li> <li>• The therapist and nurses will continue to work with your child daily to safely bathe, dress and move around.</li> <li>• your child may shower.</li> <li>• Continue oral pain medicines as needed.</li> <li>• Continue anti-nausea medicines as needed.</li> </ul>	<ul style="list-style-type: none"> <li>• Walk independently in hallway and pass Physical Therapy (includes walking up and down stairs).</li> <li>• Tolerate age appropriate diet.</li> <li>• Pain control with oral medicines.</li> <li>• Continue taking medicines to prevent constipation.</li> <li>• Review medicines with Skywalk Pharmacist.</li> <li>• Review discharge paperwork with nurse.</li> </ul>

### What happens when we go home?

**Activity limits and weight restrictions are important for healing and to keep the bar or chest in a good position.**

- **For the first 4 weeks after surgery:** have your child walk, take deep breaths and **do the exercises given by PT/OT.** Walking often is the best way to build strength.
- Bend only at the hip for the first 6 weeks after surgery. There should be no slouching or slumping when sitting. Good posture will help keep the chest and bar in a good position.

- **No heavy lifting for 3 months.** This includes heavy backpacks. Ask for an extra set of books at home for 3 months. Be sure your child has time between classes to go back to their locker often so they carry fewer books. A backpack buddy, may be helpful. The first 6 weeks after surgery, your child may lift up to 10 pounds, which is a gallon of milk. The next 6 weeks, your child may lift up to 25 pounds.
- No karate, judo, gymnastics, weight lifting, gym class or contact sports for the first 3 months.

### **Pain and constipation**

- Prescriptions will be given with directions for taking pain medicine at home. The medicine will be similar to what your child was taking while in the hospital. Tylenol and Ibuprofen work very well to control pain. Constipation is common when taking narcotic pain medicines. Keep taking the stool softener. Eating a healthy diet with fruits, vegetables and fiber will also help.

### **Incision care**

- Check the incisions daily for signs of infection: redness, swelling or pus-like drainage.
- The stitches do not need to be removed. They will dissolve in the skin, a firm ridge may develop and resolve within 4 to 6 weeks. There are 2 kinds of bandages used. Small paper tapes called steri-strips and a gauze, or a liquid bandage called dermabond. If gauze is used, it will be taken off the day after surgery.
- The steri-strips or dermabond will slowly come off with bathing. They can be taken off after 10 days if they have not already fallen off.

### **Return to school or work**

Your child may go to school or work when no longer taking narcotic pain medicine and their energy level is improved. This will be 2 to 3 weeks after surgery. Start with half days, then slowly increase to full days.

### **Follow up**

Your child will need to be seen in the surgery clinic 3 to 4 weeks after surgery. A chest x-ray will be done in the Imaging department about 20 to 30 minutes before the clinic visit.

### **Special information for the Nuss Procedure**

- CPR can be done if your child has had a Nuss procedure. More force may be needed due to the bar in the chest.
- Defibrillation for an abnormal heart rhythm may be done.
- MRI exams may be done but discuss this with your surgeon.
- During the first 3 months after a Nuss bar is placed, antibiotics might be given before any major dental work. This includes tooth pulling or braces being put on. After 3 months, antibiotics are not needed. Please discuss this with your surgeon.

**ALERT:** Call your child's doctor, nurse, or clinic if you have any questions or concerns or if your child has:

- A fever.
- A cough or chest pain that does not go away or any trouble breathing.
- Redness, drainage or swelling at the incisions sites.
- Constipation or not pooping at least every 2 days.
- Trauma or any hitting of the chest.
- Any change in the way the chest looks.
- Special health care needs that were not covered by this information.

**This sheet was created to help you care for your child or family member. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment and follow-up.**