

AFTER DISCHARGE CONT.

Outside Your Home



Driving: You are not allowed to drive while taking narcotic pain medication. After 2 weeks, if you are not taking narcotics and you are able to physically turn to check blind spots, you may drive with a seatbelt on at all times.

Flying: In most cases you are able to travel by plane 1 week after surgery unless otherwise instructed.



Do I need a letter for airport security checks when flying? During your hospital stay, you may be given a Nuss Bar Information Card to show airport personnel. Bring it with you when you travel.

Can I go through the airport body scanner? Yes. You are allowed to walk through the scanner. If the scanner is triggered, show your Nuss Bar Information Card to the security staff.



Common Questions After Surgery...Is This Normal?

Fatigue: It is common to feel tired for a few days after surgery.

Adding extra protein in your diet during this time can help you to feel better.



Swelling/Bruising: Swelling and bruising around the incisions and where the bar was placed may happen. It can last for several weeks after surgery. You can take non-steroidal anti-inflammatory medication (NSAIDs) such as ibuprofen (Advil®) to assist with swelling.

Clicking/Popping: Some patients report a clicking or popping noise after surgery. This is normal.



Bar sticking out: Patients tend to lose weight the first few weeks following surgery. During this time, the bar may become more noticeable. Over time, as patients gain the weight they have lost, the bar becomes less obvious.



PHONE NUMBERS AND LOCATIONS

Wallace Tower in Texas Medical Center

6701 Fannin Street
Level 8
Houston, TX 77030
Appointments: 832-822-3135

Texas Children's Hospital The Woodlands

17580 Interstate 45 South
Level 3
The Woodlands, TX 77384
Appointments: 832-822-3135

Texas Children's Hospital West Campus

18200 Katy Freeway
Level 2
Houston, TX 77094
Appointments: 832-227-2250

Texas Children's Specialty Care Austin

8611 N. Mopac
Level 3
Austin, TX 78759
Appointments: 737-220-8200

DAY OF SURGERY

You will be instructed when to arrive at the hospital, and when to stop eating and drinking prior to arrival.



Pre-Surgery Instruction Guide

SURGERY DATE: _____ ARRIVAL TIME: _____

Patient Name: _____ Surgery Date: _____

Doctor: _____ Specialty: _____

TEXAS CHILDREN'S SURGERY LOCATIONS

In the Texas Medical Center (TMC):

- Wallace Tower Level 8: 6701 Fannin Street, Houston, TX 77030
- West Tower Level 5: 6701 Fannin Street, Houston, TX 77030
- Loggy Tower Level 8: 6701 Fannin Street, Houston, TX 77030
- Pavilion For Women Level 5: 6701 Fannin Street, Houston, TX 77030

Texas Children's Community Hospitals:

- West Campus Hospital Level 3: 18200 Katy Freeway, Houston, TX 77094
- The Woodlands Hospital Level 3: 17580 Interstate 45 South, The Woodlands, TX 77384

At West Campus and The Woodlands, please park your car in the parking lot and garage at no charge.

EATING & DRINKING BEFORE SURGERY

Read more inside about your child's anesthesia and the importance of not eating & drinking before surgery.

- STOP Food 8 hours before arrival, at _____
- STOP Milk 6 hours before arrival, at _____
- STOP Breast Milk at 4 hours before arrival, at _____
- STOP Clear Liquids at arrival time, at _____

BATHING BEFORE SURGERY

- Wash body using soap and water. Pat dry with a freshly washed towel after bathing. Put on clean clothes. If bathing the night before surgery, make sure to sleep on clean sheets.
- Follow the specific bathing instructions from your doctor.

If all surgery instructions are not followed, your child's surgery may be cancelled.

Follow these instructions

Before surgery, you and your family will meet the surgeon and anesthesiologist in the pre-op area. You will meet with the surgeon and anesthesiologist to give consent, and they will answer your questions. You will be asked about your health history, your family's health history, and any allergies or previous reactions to anesthesia you may have had. You will also receive medication to help you relax.



THE OPERATION

During the surgery you will be asleep and will not feel any pain. The anesthesiologist will monitor your vital signs throughout surgery.



The operation starts with cryoablation. This is a technique to numb your chest by freezing certain nerves. A laparoscope (thin camera) is used to identify the exact nerves to freeze. The camera will be inserted into a 5mm incision. You will have one small incision on each side of your chest. The effects of cryoablation can last up to 3 months. Cryoablation gives you long-term pain control while your chest heals.



Next, your surgeon will begin the Nuss procedure to place the bar across your chest. During the procedure, a stainless steel or titanium bar is bent to fit your chest wall. The surgeon inserts the bar through an incision on the side of the chest wall and pushes it across using the help of a laparoscope to see the area and avoid injuring the heart. The bar is fit over your ribs on the sides and under your sternum in the middle of your chest. With the bar in place, your sternum is moved into the new position. The ends of the bar are secured to your chest wall and the incisions are closed on both sides.



What are the risks of the operation?

Injury to the heart and lungs is rare. Air in the chest (pneumothorax) or fluid in the chest (pleural effusion or hemothorax) can occur but is also rare. Infection and allergic reactions to the bar are rare. The most common concern is that the bar might rotate or move to a new position due to pressure on the bar. This can happen even though the bar is stabilized to the chest wall during surgery. Some rotation of the bar is expected, but too much rotation may result in the return of the original condition and another operation.

How long does the surgery take?

The operation usually takes about 2 hours but some cases may take longer.

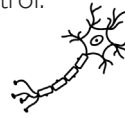


AFTER SURGERY

Controlling Pain

Pain after surgery is common. Your pain will be managed by a team of Anesthesiologists specialized in pain control.

You will receive pain relievers and medicine to relax your muscles. You may also receive medications called neuromodulators (like gabapentin) that help calm reactions from nerves that were affected during surgery. All of these medications will be adjusted as you heal.



Cryoablation may reduce the amount and duration of pain after the procedure. Results are different in each patient.

You will also be placed on medications or a diet to help avoid constipation.

Is it common to have pain after going home?

Yes, you will have some pain, but it should be manageable with the medications prescribed. Take them as directed.



What if my pain is not controlled with the medication?

Call our surgery clinic to discuss your pain levels. You may need to come in for an office visit.



What if I have been constipated since surgery?

You will receive medications during your hospital stay and when you go home to help you have a bowel movement without straining. Make sure to take these while taking narcotic pain medications.

Are antibiotics required before dental procedures due to the implanted bar?

No, preventive antibiotics are not necessary.

Activity

Activity restrictions are necessary to make sure the Nuss bar stays in place and becomes stable.

Within hours of surgery: You should be able to walk to bathroom and around the room with assistance. Use your incentive spirometer (IS) 10 times per hour while awake. The IS keeps your lungs inflated and is an important part of your recovery. Hospital staff will show you how to use this simple device.



Within days of surgery: You should be able to walk to the bathroom and around the hospital floor with assistance as needed. Walking will help improve blood flow and normal breathing function. It also speeds up wound healing. Keep using the IS 10 times every hour while awake.

First 2 weeks after surgery: Continue to walk and **avoid twisting your upper torso**. Do not participate in strenuous exercise. Only non-contact and non-impact activities are allowed. Walking is the best activity during this time. Take your IS home with you and use it 10 times per hour while awake. If you are up and moving most of the day, the IS may not be necessary.



2 weeks to 12 weeks after surgery: You should continue to walk but **do not rotate or twist your upper torso**. Do not participate in strenuous exercise. Only non-contact and non-impact activities are allowed.

3+ months after surgery: You are allowed to do regular exercise activities and contact sports if your healthcare team approves.



Diet

After surgery you may have nausea and/or vomiting. You will start with clear liquids and move to a regular diet. There are no restrictions to diet after surgery.



Will I lose weight after surgery?

Some patients lose 5 to 10 pounds after surgery. Adding protein or nutrition drinks to your diet and increasing calories can help you maintain your weight.



Imaging

You will have a chest X-ray immediately following surgery and on the day you leave the hospital. The images will be reviewed with you before going home or at your first follow-up visit.



Can I have an MRI done with the bar in place? The company that produces the bar provides information about magnetic resonance imaging (MRI). See the end of this section.* If you are being scanned, make sure to tell the radiologist about your Nuss bar. They will decide if you can be scanned.

Going Home

Length of stay is different for everyone, but patients with a Nuss bar usually stay in the hospital for 1 to 3 days.



In order to go home, you need to reach the following milestones:

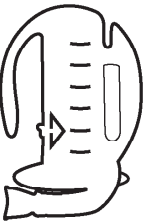
- 12 hours without narcotic medications given through an IV
- 12 hours without fever
- Eat a regular diet



No sports or physical education for up to 6 weeks

No strenuous exercise, non-contact activities, or non-impact activities for first 6 weeks.

Walking is an ideal activity during this time.



Take your Incentive Spirometer (IS) home with you.

*<https://www.zimmerbiomet.com/content/dam/zimmer-biomet/medical-professionals/Thoracic/pectus-excavatum/pectus-bar-overview-technique.pdf>
MRI Information: The Pectus Bar Implant, Part #01-3717 is MR-conditional according to the terminology specified in the American Society for Testing and Materials (ASTM) International, Designation: F2503-05, Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment. Non-clinical testing demonstrated that the Pectus Bar Implant, Part#01-3717 is MR-Conditional. **A patient with this implant can be scanned safely immediately after placement under certain conditions:** Static magnetic field of 3-Tesla or less. Maximum spatial gradient magnetic field of 720-Gauss/cm or less. **Please see the link above for MRI-related heating specifications and specifics on artifact information for MR image quality.**

AFTER DISCHARGE

Follow-up Appointments

You will receive a phone call 3 to 5 days after going home.



The first follow-up visit will be 2 weeks after leaving the hospital. It can be a virtual visit or in-person. During this visit we will discuss your activity level and exercise options. At this visit, you can schedule 3-month and 2.5-year follow-up visits.



At the 2.5-year follow-up visit, we will discuss scheduling the bar removal procedure at the 3-year point.

When should I be concerned and seek medical attention?

If you notice a sudden change in the appearance of your chest and/or have severe, unexplained chest pain, fever and/or shortness of breath, please go to the emergency department.

Do I need physical therapy?

Your provider will discuss exercises you can do at home during your first follow-up visit after surgery. Going to a physical therapist is not necessary for most patients.

