

# Surgery Specific Information for Pectus Excavatum Repair

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## Do I have to do anything special to prepare for surgery?

### Allergy testing

Tell your surgeon if you have sensitive skin or any known allergies. While it is only rarely an issue, some patients get metal allergy testing to see if a special bar will be needed.

### Diet

The day before surgery you will have to stop eating solid food at least 8 hours before. You can drink clear liquids (like water, juice, or Gatorade) up until 2 hours before your surgery but be sure to ask your team about the exact time you should stop eating and drinking liquids.

### Purchases

If you elect to have surgery, please buy a **medic alert bracelet** with the following inscription: *“steel bar in chest, CPR use more force, cardioversion ant/post placement.”*

## What should I expect after surgery?

### Pain control

Pain management is an important concern for us. In fact, we will start your medication **before** surgery in the preoperative area. Additionally, when we do surgery for pectus excavatum at Mott Children’s Hospital, we perform **cryoablation**, a special tool to numb the nerves between the ribs while you’re recovering. This lasts for 2-3 months. Cryoablation improves pain control with less narcotic (opioid) use and a shorter hospital stay.

It takes a few hours for the cryoablation to set in, so at the start of the surgery, our anesthesia team will inject additional medicine into your back before you go to sleep, and your surgeon will also inject numbing medicine near the incisions on your chest and around the nerves. After surgery, we will also give you a medication for nerve pain (Gabapentin), anti-inflammatory medicine (Toradol in your veins at first, then we'll switch to Ibuprofen) and Tylenol. This is known as "multi-modal pain management" since each medicine works differently to help control your pain. We can add narcotic pain medicine if we need to, but we do our best to give as little as possible. Most people do not need a prescription for narcotics when they go home.

### **Showering and bathing**

After surgery you will have incisions that will need to heal. We recommend no showering for 48 hours and no soaking in water for 1 week.

### **Hospital stay**

On the day after your surgery, we will have you work with our physical therapists. They will teach you how to get out of bed without using your arms to push yourself up. Once you're comfortable with their recommendations, you can eat and drink, and your pain is controlled with only pain medicine by mouth, you will be ready to go home. This typically takes 2-4 days.

### **Activity and Restrictions**

We will encourage you to move early and help get you out of bed on the afternoon or evening of surgery. You will work with physical therapy the day after surgery, and they will help you be as mobile as possible. Please limit:

- Side lying while sleeping
- Side-to-side bending at the hip
- Twisting at the waist

With a bar in place, we recommend you gradually increase your activity for the first 3 months after surgery. The cryoablation often will make you feel like you can get back to regular activity and sports quickly after surgery; however, **your body will still need time to heal**. We recommend you wait to play contact sports until cleared by your surgeon. However, you can slowly start to do more activity (as listed below) as your body allows and should be back to normal at 3 months after surgery.

### **Follow-up**

We will see you in clinic several weeks after surgery with a CXR before your visit. We want to look at your chest and the bar to be sure everything is healing well. Depending on your progress and timing of your visit, your surgeon will determine your timeline to getting back to full activity, but the above is a good guideline.

### **Week 1 after surgery:**

- **Stay active**
  - Walk several times per day
  - Use your incentive spirometer
  - Raise your hands above your head to brush your hair but don't keep them up for prolonged amounts of time
- Avoid sleeping on your side
- Do not lift more than 5lbs
- Do not drive
- Sit in the back seat of the car to avoid the airbag in the front seat

### **Week 2-3 after surgery:**

- FYI: It's normal to see the bar on your chest now that the swelling is gone
- Do not lift more than 5lbs
- Return to work/school

- Focus on posture exercises
- By week 3, it's ok to remove your steri strips if they haven't fallen off

### **1 month after surgery:**

- You can sit in the front seat of the car
- You can drive if you can react appropriately without pain and are not on narcotics
- You can carry your backpack but still, do not lift more than 5 pounds
- You can jog on a level surface and slowly increase your aerobic activity

### **2 months after surgery:**

- Begin light upper body weight training (around 10lbs)
- Begin to increase your aerobic activity

### **3 months after surgery:**

- You should be back to baseline and can resume activity as usual, to include contact sports, swimming, marching band, twist your trunk and chest (i.e., swinging a bat, golf club)

### **A few more things to know after discharge:**

- Wear your medical alert bracelet after surgery.
- **For Magnetic Resonance Imaging (MRI's):** tell the radiologist that you have a Nuss bar in place. No special adjustments need to be made for CT scans.
- Your **wound** and your **chest**:
  - Bruising is normal but **please call if** you are concerned about redness, swelling, blistering or pus from or around the incisions. Take a picture and send it to us through the portal or contact the clinic: (734-936-4151)
  - It is not unusual to have **occasional chest pain** after surgery, particularly with movement and as you increase your physical activity. When this happens, try taking Ibuprofen first and follow with Tylenol if needed.

Warm compresses, stretching and breathing exercises can help too. Some worry about the bar shifting when this happens, but this is really rare. If it does happen, you would notice a sudden change in your chest appearance and may see the bar sticking out on the sides, and you should call us.

- After cryoablation, the area of the chest is numb until the nerves come back to normal. **Very rarely** people notice “nerve pain” that we would like you to call us about. We will ask you several questions to decide if you need a medication to help with this.
- Keep doing the exercises your PT gave to you when you were in the hospital. It is really important to keep up with these exercises and contact us if you’d like an outpatient PT appointment.

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