

## Pectus Excavatum Repair In Children

### A Guide for Families

#### What is a pectus excavatum?

Pectus excavatum is the most common chest wall deformity in children, occurring more commonly in boys than in girls. It results from abnormal growth of the cartilage attached to the sternum (breast bone), causing the sternum to become concave in shape and, in some children, rotate or twist to one side or the other. A pectus excavatum deformity is present at birth and generally grows more severe over time.

#### Why does my child need surgery?

In most children, this deformity poses no additional health risk or problem. Surgical repair is done primarily for cosmetic reasons. However, in rare cases, this deformity can be so severe that it may lead to lung and heart problems; making surgical repair necessary.

#### What is done during surgery and how long does the operation take?

Repair of a pectus excavatum can be accomplished in one of two ways. The traditional approach involves making a long incision across the chest and removing the deformed cartilage. The sternum is then moved forward and is secured in the corrected position with metal struts. This operation takes about four hours to complete.

A new alternative approach involves placing a metal "pectus bar" without a large incision or removing deformed cartilage. In this procedure, a Band-Aid-size incision is made on each side of the chest and the lower edge of the sternum. The pectus bar is inserted through one of the side incisions and placed under the sternum, moving it forward, straightening the cartilage and making the chest flat. It is then secured through the small incision over the sternum. This operation is completed in about one hour.

In either operation, there is very little blood loss so no blood is reserved ahead of time for your child. Blood will only be given during this surgery in the case of extreme emergency.

All of the stitches that are used are placed under the skin. These will dissolve on their own so there are no stitches to remove. Your child's incision will be covered with small bandages called Steri-strips®.

#### How long will my child stay in the hospital?

Following surgery, most children stay in the hospital for about five days. An epidural catheter placed in your child's back will be used to give a continuous drip of pain medication for the first few days when the pain is the greatest. As the pain lessens, pain medication is begun by mouth a few days before discharge.

#### How do I take care of my child at home following discharge from the hospital?

**Pain:** Most children only need Tylenol® or Motrin® by mouth every four to six hours once they are at home. If your child is still uncomfortable, call our office and we will prescribe something stronger.

**Dressings:** Gauze and clear plastic dressings may be removed two days after surgery. There may be a small amount of blood on the Steri-strips covering the incision. This is normal. The skin surrounding the incision may be red and bruised, and the incision will be slightly swollen. Your child can bathe with the Steri-strips® in place. These are to be removed one week after the operation.

**Swelling:** There will be some swelling of the incision. After the incision is healed you will be able to feel a firm ridge under the incision called a "healing ridge." It usually is present for several months.

**Bathing:** Your child may bathe or shower as soon as two days after surgery, although this may not be possible while your child is still receiving IV fluids and epidural anesthesia. Once your child is feeling better, either in the hospital or at home, he or she may bathe or shower without restriction.

**Activity:** For children undergoing the traditional repair, we recommend no contact sports for three months after the operation. For children who have the pectus bar placed, we recommend no contact sports for one month following the operation. Except for these restrictions, your child can go about his or her activities as usual.

### Do I see the surgeon again after the operation?

If all is going well, we recommend a visit to our office between two and four weeks after hospital discharge. A visit with your child's pediatrician one to two weeks after the discharge also is a good idea. You should call our office if you are worried about how things are going once your child is home.

### When do I call your office?

**Call us at (415) 476-2538) if:**

- You have any concerns about your child's recovery
- Your child has a temperature of 101.5 degrees or higher
- Your child's incision is red
- Your child has severe pain and tenderness at the incision
- Any fluid is coming out of the incision

### When are the metal struts/pectus bar removed?

The struts are removed one year after insertion. Call our office and we can schedule the operation. Removal takes about one hour and is done as an outpatient procedure so that you can return home with your child the same day.

The pectus bar is removed two years after insertion. This is also an outpatient operation that takes about one hour. A visit to our office is recommended at one year and again at two years, just prior to removal.

### GLOSSARY

**Cartilage:** Soft flexible tissue attached to bone.

**Sternum:** The bone in the middle of the chest, attached to the ribs

**Incision:** The surgical cut into the skin

**Steri-strips®:** Small, white bandages that look like tape and are placed over the incision

**Metal struts:** Small metal bars that fix the cartilage and sternum in a flat position

**Pectus bar:** A stainless steel bar placed under over the ribs and under the sternum that moves the sternum forward in a flat position

***This information is for educational purposes only and is not intended to replace the advice of your physician or health care provider. We encourage you to discuss with your physician any questions and concerns you may have.***