

Alaska Pediatric Surgery

Patient Information Sheet:

Pectus Excavatum

Definition

Pectus excavatum or “sunken chest” is a depression in the chest. The depression may be in the center of the chest or more pronounced on one side (asymmetrical). You may also hear the terms “cup,” “saucer-shaped,” “horns of steer,” or “elongated” used to describe this condition. A child can be born with pectus or develop their pectus during their pubertal growth spurt. The pectus may become more severe with growth spurts.

Evaluation

A grading system is used to describe the extent/depth of the pectus: mild, moderate or severe. Not all sunken chests require corrective surgery. Mild depressions can often be helped by exercise and/or a posture “Figure Eight” brace. These techniques strengthen the chest’s wall muscles and help to improve posture. Moderate to severe depression may require corrective surgery. The pectus depression can squeeze or crowd the heart and lungs. These children may have difficulty catching their breath, tire easily, and/or complain of chest pain during exercise. We can determine the “grade” (severity) of the pectus by calculating the Haller index from your child’s cardiac/thoracic MRI or CT scan of the chest.

Early evaluation by a pediatric surgeon is beneficial. Bones are softer in young children and more easily reshaped. Specific exercises or use of a brace can be helpful for children with a mild to moderate depression. As the pectus worsens and the child approaches the teenage years, the bones become harder. This can make it more difficult to raise the sternum up allowing more room for the heart and lungs. However, surgery can be successfully performed on patients through adulthood. The bar usually stays for about 2 years depending on the deformity. When it is determined appropriate for removal it will be removed surgically.

The Day Before Surgery

- Do not allow your child to eat or drink anything after midnight.
- Our office will call to let you know what time to show up for surgery and answer any questions you have.

The Day of Surgery

- Your child will be under general anesthesia (asleep) during the operation.
- Your child will receive pain medications through an intravenous line (IV) during surgery.
- The IV will remain in place to give fluids and medicine until your child leaves the hospital.
- A small plastic tube (foley catheter) will be placed in your child’s bladder after he is asleep to drain urine.

- Two small incisions will be made for each bar, one on each side of the chest. This is where the metal bar will be placed under the breastbone. Another small incision will be made on the right side of the chest. This is where a small camera will be inserted to allow the surgeons to see inside the chest cavity as they guide the bar from one side of the chest to the other.
- A flat surgical bar that has been curved to fit your child's chest will be placed under the breast bone and rotated to "pop out" the depression. The bar usually needs to stay in place for two to four years. There are no stitches on the outside, just small paper bandages (Steri-Strips).

After the Surgery

- Your child will first go to the Post Anesthesia Recovery Unit (PACU) after surgery and then to a room on a nursing unit.
- Your child will receive several different medicines to relieve pain. These medicines are given both through the IV as well as by mouth. Your child may also be prescribed a "PCA" (patient controlled analgesia) to help with pain control. Drowsiness is a common side effect.
- Your child may have ice chips and sips of fluid immediately after the operation. Food will be added to your child's diet gradually. As soon as your child's appetite returns and there are no problems with nausea or vomiting, he/she will get a regular diet food tray.
- Your child may begin to sit up in bed, as soon as he/she is ready. Remind your child to keep the back straight while sitting.
- The bladder catheter is usually removed on the morning after the operation, it may stay longer if your child has an epidural in place.
- Constipation is a common problem for patients who are receiving narcotic pain medications. To help prevent this, your child will receive a stool softener and/or a suppository.
- A physical therapist will help get your child up to walk the first day after surgery. The therapist will teach your child how to move without moving the bar.
- Your child will need to do a lot deep breathing and use the incentive spirometer. He/She will also need to get up out of bed and walk as much as possible. This will help breathing return to normal.
- Your child will be able to move around a little more every day. As soon as he or she is able to move and walk around without problems and no longer requires IV pain medication your child will be able to go home- usually 5-7 days after surgery.

After discharge

- Your child will be discharged with a prescription narcotic pain medication. It is important to remember that constipation is a common problem for patients who are receiving narcotic pain medications. To help prevent this please continue an over the counter stool softener after discharge. No prescription is needed for this.
- We do not recommend going to school until the patient is off narcotic pain medications. It is reasonable that your child will miss 2-3 weeks of school following surgery.
- If your child is old enough to drive they are not able to drive while on narcotic pain medication.
- No heavy lifting or contact sports for 3 months.
- We will plan on seeing you back in clinic 2-4 weeks after surgery to see the surgeon.

****Call Alaska Pediatric Surgery with questions or concerns 929-7337****