PECTUS EXCAVATUM
“SUNKEN CHEST”

PECTUS EXCAVATUM or “sunken chest” is a depression of the sternum (breast bone). The depression may be equal on both sides or deeper on one side. A child can be born with a pectus excavatum and the depth of the defect may increase with age. However, many patients only develop a depression of the sternum in their early teenage years.

Not all children with a pectus excavatum require surgery. Mild cases may respond to an exercise and posture program as described in the accompanying information sheet. We reserve surgical correction for those patients with moderate to severe (deep) defects. The pectus excavatum defect rarely causes “significant” physical symptoms and therefore the main indication to perform surgical correction is for altered body image. For example, patients will often avoid removing their shirts in a public situation due to the fear of being ridiculed by others.

Surgical correction is best done between the ages of 14 to 17 years, but can be accomplished even into the early 20s (in an adult centre). In most cases the surgery for Pectus excavatum can now be done using minimal access surgery techniques. This means that we now use smaller incisions and avoid the need for extensive removal of
cartilage tissue. As shown in the accompanying diagram, this new technique involves inserting a metal bar, which is left in place for approximately 2 1/2 years.

The procedure is done under general anesthesia. The bar is measured and shaped for each patient, inserted under the sternum and then turned to correct the depression in the anterior chest wall. The stitches used to close the two small incisions dissolve and therefore do not need to be removed. Most patients remain in hospital for 5 days after the procedure. After discharge home there initially is limitation of physical activities as described in the Discharge Instructions information sheet.

The significant advantage of this new minimal access technique is that it avoids the use of a large incision on the anterior chest wall. The two small incisions that are used at the sides of the chest are much less noticeable. The bar immediately corrects the defect and then allows the tissues to remodel over time into the correct shape. Removal of the bar at approximately 2 1/2 years requires only a day surgery procedure (no overnight stay), with only limitation of activities for 1 week.
Every operation has potential complications (infection, poor correction, recurrence of the defect, etc) and these will be discussed fully prior to making any decision regarding surgery.

If you have any questions or concerns after reviewing the material you have received please feel free to arrange a follow-up appointment to see Dr. Fitzgerald or Dr. Walton if you have not already done so.

Dr. Peter Fitzgerald MD, FRCSC  
McMaster Children’s Hospital  
Room 4E2, Department of Surgery  
1200 Main St. W.  
Hamilton, ON  
L8N 3Z5  
Email: fitzger@mcmaster.ca  
Clinic: (905) -521- 5094  
Office: (905) 521-2100  
Fax: (905) 570-8958 or 521-9992

Dr. Mark Walton MD, FRCSC  
McMaster Children’s Hospital  
Room 4E3, Department of Surgery  
1200 Main St. W.  
Hamilton, ON  
L8N 3Z5  
Email: waltonj@mcmaster.ca  
Clinic: (905) -521- 5094  
Office: (905) 521-2100  
Fax: (905) 570-8958 or 521-9992