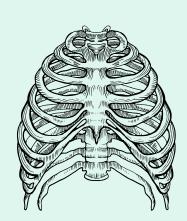
# PECTUS EXCAVATUM



### WHAT IS IT?

Pectus excavatum (PE) is a congenital (present from birth) abnormality where there is a **depression in the sternum**. Pectus chest deformities are among the most common major chest deformities found in children and are more commonly predisposed in **males** with it being **PRESENT IN 1 OUT OF 300-400 LIVE BIRTHS** 

There is a common misconception that PE is just a cosmetic deformity with no medical consequences when in fact the patient can potentially have severe cardiopulmonary effects as they age.



## SYMPTOMS



- Dyspnea (shortness of breath) with mild exercise
- Progressive loss of stamina
- Chest pain when doing mild physical activity
- Chest pain without exercise
- Worsening, progressive fatigue
- Heart Palpitations at rest
- Tachycardia (Heart rate: >100 BPM)
- Wheezing when doing exercise
- Frequent upper respiratory infections

# PSYCHOLOGICAL EFFECTS

Body image issues

Significant embarrassment from the appearance of the chest

#### SHOULD YOU GO FOR SURGERY?



If you display **more than one of the physical symptoms**, you should have a medical consult with your doctor who may suggest several different types of tests to check for associated problems with the heart and lungs like Chest X-rays, Computerized tomography, Electrocardiogram, Echocardiogram etc. The doctor may potentially refer you to have corrective surgery.

#### **TREATMENT**

#### The Nuss Procedure

A small camera is inserted into the chest to guide the procedure after which two small incisions are made on either side of the chest. A curved steel bar is then inserted behind the sternum and ribcage to correct the depression and is secured to the chest wall on each side, and is **left there for 2 - 3 years** 

#### **Modified Ravitch technique**

An incision is made on the front of the chest with the removal of the overgrown cartilaginous part of the ribs. This allows the sternum to be pulled forward, away from the heart and lungs and into the normal plane of the chest wall. A small metal bar is then placed behind the sternum to hold it in place for **6 to 12 months**.



Both surgeries have **high efficacy rates** and **rarely causes adverse side effects**. Currently, most surgeons will wait until the patient reaches adolescence or early teenage years to perform surgery. This is because if the repair is done at too early of age it may result in improper growth of the chest wall and other complications.

