Pectus excavatum

This information sheet from Great Ormond Street Hospital (GOSH) explains the causes, symptoms and treatment of pectus excavatum (also known as funnel chest) and where to get help.

What is pectus excavatum?
Pectus excavatum (also known as funnel chest) is a condition in which, instead of being level with the ribs, the breastbone (sternum) is ‘sunken’ so that the middle of the chest looks ‘caved in’. Pectus excavatum affects about 1 in 1000 children and is four times as common in boys as in girls.

What causes pectus excavatum?
We are not sure what causes ribcage problems, but it seems to be linked to the cartilage in the ribcage overgrowing. More research is needed to confirm the cause. There may be a genetic link to ribcage problems, as it seems to run in families.

What are the signs and symptoms of pectus excavatum?
Pectus excavatum is usually noticeable soon after birth. Ribcage problems do not usually cause problems when the heart and lungs are developing, but rarely can affect how well they work in later childhood. As the ribcage is more rigid than normal, it can make it difficult to completely breathe out (expire). This can have a ‘knock on’ effect on how well a child can exercise and his or her stamina.

The unusual appearance of the ribcage can also make children self-conscious, although not every child is affected in this way. It is often in teenage years that unusual chest shape is more of a problem, when clothes and appearance become more important.

Pectus excavatum can appear as a symptom of another disorder or syndrome (collection of symptoms often seen together). It can appear as a symptom of Marfan syndrome or sometimes alongside scoliosis (curvature of the spine).
**How is pectus excavatum diagnosed?**

A variety of tests are used to diagnose pectus excavatum, which will include breathing tests to show the effect of the ribcage problem on your child's breathing and scans to give detailed measurements of his or her ribcage.

**How is pectus excavatum treated?**

If the ribcage problems are not causing any physical or psychological problems, a child may not need any treatment. When ribcage problems are affecting a child's lung function or are causing serious psychological problems, an operation to correct the problem might be suggested.

This surgery is usually suggested when a child's ribcage problem is affecting his or her breathing or lung function. It may also be suggested if it is causing severe psychological problems.

**What happens next?**

Pectus excavatum is usually cured by surgery, but occasionally it can develop again years later.

**Further information and support**

UK Pectus Excavatum and Pectus Carinatum Information Site – www.pectus.org