Pectus Carinatum or ‘Pigeon Chest’ is a condition that causes a prominence of the sternum or breastbone. It can be of varying severity and may cause anxiety to some. It is possible that more severe cases may interfere with full lung function.
Orthotic therapy

Due to the re-modelling characteristics of the bones and ligaments of the chest wall, pectus carinatum can be reduced or normalized with a compressive force on the chest. Over time with compression, the chest wall changes shape and flattens out, giving a more normal appearance.

To achieve a compressive force on the chest, a chest orthosis (or brace) is used. This is simply called a pectus brace.

In some cases, a custom-made brace is required, but usually a pre-fabricated brace will be able to be fitted on the day of assessment.

The pectus brace is worn as much as possible until the chest deformity has normalized. This may take up to six months. After the shape has normalized the brace is worn at night only for a further three to six months to prevent a relapse. After this, the chest should remain in a corrected shape.
Putting on, and Taking off the brace

A thin cotton t-shirt or singlet should always be worn underneath your brace. To put the brace on, position the brace on the chest over the highest part of the prominence, the bigger pad goes at the back, smaller at the front. Thread the ladder strap through the ratchet on the side and tighten. Tighten enough so that compression is felt but breathing feels normal. The brace is removed by the undoing the ratchet on the side of the brace. Push down on the silver release lever to undo. When removing the brace, only one side needs to be loosened.
Wearing schedule

A weaning in process is used to get you used to wearing the pectus brace, with the aim of wearing the brace for 16-20 hours per day from day 6 onwards.

Day 1
Wear for 30 minutes in the morning and remove. Then wear for 30 minutes again later in the day. (Total wear time approx. 1 hour)

Day 2
Wear for 1 hour in the morning and remove. Then wear for 1 hour again later in the day. (Total wear time approx. 2 hours)

Day 3
Wear for 2 hours then remove. Wear for 2 hours again later in the day. (Total wear time approx. 4 hours)

Day 4
Wear for 4 hours during the day, and then to bed (approx. 8 hours) (total wear time approx. 12 hours)

Day 5
Wear for 6 hours during the day, and then to bed (Total wear time approx. 14 hours)

Day 6
Wear for 8 hours or more during the day and then to bed. (Total wear time 16hours +)

You should expect to have some discomfort when wearing the brace initially; however it should not be painful. Contact your orthotist if you are experiencing pain or severe discomfort when wearing the brace. Continue to monitor the skin for pressure areas. Redness is expected over the prominence, but should disappear within a half hour to an hour of the brace being removed. If you have angry redness that is painful and/or not disappearing, you need to contact the orthotist for a review.

Follow up appointments will occur with your orthotist to adjust brace.
Taking care of your brace

The foam pads on the brace can be washed by hand with soap and water and toweled dry. Do not dry the brace with heat or place brace near any heating device. The brace is not to be worn during strenuous physical activities or in the shower.

Follow-up

Appointments should be made for four weeks after initial fitting, then at eight weeks and then every three months for progress to be monitored and the fit adjusted. This will vary depending on age and severity of the pectus carinatum. There is no fee for the follow-up appointments.

If you have any concerns or queries, please call our office.

‘Melbourne’s most experienced Paediatric Orthotists’
Main Consulting Rooms: 18 Stirling Crescent, Surrey Hills. VIC. 3127
Also consulting at: 219 Abbotsford St North Melbourne (close to RCH)