

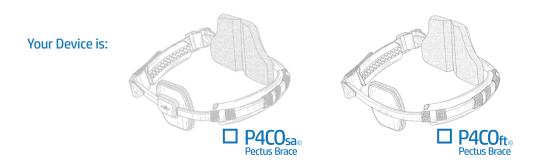
Pectus Carinatum Carbon Compressive Chest Orthosis

# Patient's Guide





# The Patient's Guide



# Introduction

Pectus Carinatum ( PC ) or "pigeon chest" deformity, is a protrusion of the chest wall and occurs less frequently than Pectus Excavatum ( a depression of the chest wall ). The etiology of PC is unknown; however a genetic causation is apparent in about 25% of patients with a family history of chest wall defects.

Pectus Carinatum is often noticed during childhood, especially around the time of growth spurts and the onset of puberty. Most patients are asymptomatic experiencing only mild tenderness at the site of the protrusion. Conditions which are associated with PC include Marfan's Syndrome and Scoliosis.

The P4CO© Line was designed as a Non-Invasive method to treat PC. By applying a gentle, compressive force to flatten the protrusion, the patient is spared from having thoracic surgery. Composed of a gel chest pad and neoprene back pads, connected by a single carbon band, the P4CO© Line is easily donned and adjusted. By applying a consistent compressive force to the chest wall over a period of time, flattening of the chest wall prominence occurs.

## **Orthotic Success Requirements**

- 1. Wearing the device 18 hrs in a 24 hour period (or as instructed by your Physician).
- 2. Taking care of your skin and monitoring its condition.
- 3. Launder the P4CO cloth covers on the front and back pads. Launder both the front and back socks 2x per week or as needed with mild detergent. Allow the socks to dry before reapplying.
- 4. Making sure the P4CO© Orthosis is applied correctly each time it is worn.
- 5. Calling our office with any questions or problems so time out of the P4CO© Orthosis is kept to a minimum.



# Wear and Care Guide for the P4CO©

Applying your orthosis (for applying under the left arm).



Start by holding the buckle on the front of the brace in your right hand and the back buckle in your left hand.



Gently spread the brace open and slice the brace across your chest until the carbon bar rests against your ribs under your left arm.



Next ensure that the front pad is centered over the prominence on your chest. The "V" groove in the back pad should be centered along your spinal column.



Now check the orthosis is level from front to back (parallel to the floor) and that the chest pad and back pad are opposite each other on your body.



Place the velcro® strap through the loop in the buckle and tighten the strap to the white velcro® strip placed by the orthotist.



Perform a final check of pad placement on the prominence;

- The brace is level.
- The front and back pads are mostly opposite each other when viewed from the side.
- The carbon Bar is against the chest wall.

A donning video is available at: www.braceforpectus.com/video



## If PACU is installed

As flattening of chest prominence occurs, it will be necessary to increase the compressive forces acting on the chest. Depending on the orthosis you are wearing, please perform one of the following:

- Patients wearing the P4COft will schedule an appoinment with our office for the addition of spacer plates.
- Patients wearing the P4COsa will increase the compression of the chest pad by inserting
  the supplied hex wrench into the head of the bolt on the front of your brace. From the
  patient's perspective, turn the wrench counterclockwise one revolution at a time until the
  desired tension is reached.



# **Wearing Schedule**

The wearing schedule is as follows (hours on are consecutive):

#### **WEEK ONE:**

#### **DAYS 1-2**

Do NOT wear to school, Do NOT sleep in brace. Wear brace 2hrs, take off 2hrs. Alternate this pattern during daytime.

#### **DAYS 3-4**

Do NOT wear to school, Do NOT sleep in brace. Wear brace 3hrs, take off 2hrs. Alternate this pattern during daytime.

#### **DAYS 5-7**

Do NOT wear to school, Do NOT sleep in brace. Wear brace 4hrs, take off 2hrs. Alternate this pattern during daytime.

#### WFFK TWO:

#### **DAYS 1-2**

Do NOT wear to school, Do NOT sleep in brace. Wear brace 5hrs, take off 2hrs. Alternate this pattern during daytime.

#### DAYS 3-4

Do NOT wear to school, Do NOT sleep in brace. Wear brace 6hrs, take off 2hrs. Alternate this pattern during daytime.

#### **DAYS 5-7**

Do NOT wear to school, Do NOT sleep in brace. Wear brace 8hrs, take off the remainder of the day.

## **WEEK THREE:**

## **DAYS 1-7**

Begin wearing to school. Try to sleep overnight in brace. Brace may be removed for 6hrs in a 24hr period, with the patient deciding when to remove the brace.

Examples of removal: to eat dinner estimate 30min, to take a shower est. 30min, after school sports est. 2hrs-this would total 3 hours used. Brace must be removed for swimming, bathing, gym or organized sporting activities.

## **WEEK FOUR:**

## **DAYS 1-7**

This is the FULL TIME week. Brace should be worn during school hours and all night. It requires wearing the brace a total of 18hours in a 24 hour period. Brace may be removed for 6hrs. in a 24hr period, with the patient deciding when to remove the brace.

Examples of removal: to eat dinner estimate 30min, to take a shower est. 30min, after school sports est. 2hrs-this would total 3hours used. Brace must be removed for swimming, bathing, physical education or organized sporting activities.

AT ANY TIME DURING THE FOUR WEEK WEARING SCHEDULE, CALL OUR OFFICE WITH ANY BRACE PROBLEMS YOU EXPERIENCE.

## Skin Care

It is very important to prevent skin breakdown. If you have any red, sore, bruised or raw skin, remove the brace and contact our office as soon as possible. Areas under the brace may become pink or red, this is normal. Aquaphor® may be applied to the skin on the red areas when the brace is not being worn. Any irritation should disappear within 30-60 minutes after brace removal. Zinc Oxide powder such as Caldesene® may be used on the skin in contact with the pads to control perspiration. Do not use any powder under the arms where the brace contacts the skin. The pads in this area have a silicone bead which grips the skin to hold the brace in place on the torso.

# Cleaning the P4CO©

Launder both the front and back socks 2x per week or as needed with mild detergent. Allow the socks to dry before reapplying.