

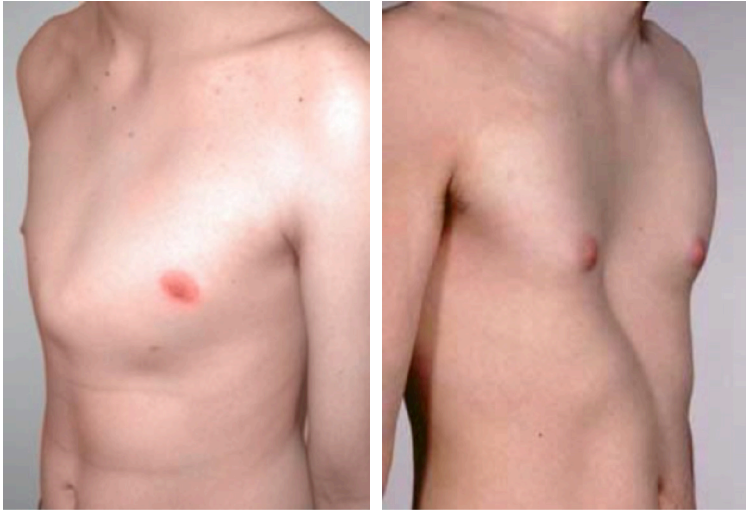
Department of Thoracic Surgery

# Pectus Excavatum / Carinatum Procedures to correct defects to the chest wall



Dr. Hans Clean says “The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Wash your hands with soap and warm water and dry thoroughly. Use hand gel, if provided, in care facilities.
- If you have symptoms of diarrhoea and vomiting stay at home and do not visit relatives that are vulnerable in hospital or in residential care. You will spread the illness.
- Keep the environment clean and safe. Let's work together to keep it that way. Prevention is better than cure”.



This leaflet has been written to provide information about surgery to correct a defect in the chest wall (Pectus Excavatum /Carinatum). We hope it answers some of the questions or concerns you may have. It is not intended to replace talking with medical or nursing staff.

## What are Pectus Excavatum / Carinatum?

Pectus Excavatum / Carinatum are birth defects affecting the chest wall. In Pectus Excavatum the breastbone is depressed, causing a sunken appearance to the chest (funnel chest) and in Pectus Carinatum the breastbone protrudes outwards (pidgeon chest). It is common for the deformity to have asymmetry and other rarer variations exist.

## What causes Pectus Excavatum / Carinatum?

The defect is thought to be caused by excessive growth of cartilage, although the reason for this is unknown. This overgrowth causes the ribs and cartilages to 'buckle' and pushes the breastbone either inwards or outwards. The defect is often noticeable at birth but usually becomes more apparent in early adolescence and is more common in boys than girls.

## How is it corrected?

It is sometimes possible to have surgery to correct the defect.

Surgery is performed under a general anaesthetic therefore you will be asleep during the procedure. Once you are asleep an incision is made in your chest and the defect is corrected by lifting and repairing the chest wall muscles and cartilages. It is sometimes necessary to reset the breast bone so it lies flat and insert a metal bar for support. One or two small drains are inserted to drain any bleeding or fluid from the site and the wound closed using dissolvable stitches.

## Will I feel any pain or discomfort after the procedure?

You may feel slightly uncomfortable after the procedure but you will be given medication to help control this.

Alternatively you may be given a special pump to help control any pain or discomfort. The pump is attached to you by a small tube, usually in the back of your hand. You will be given a hand held button which delivers a measured amount of pain relieving medication through the tube each time you press it.

You will be told how to use the pump if your doctor feels this is appropriate for you.

## How long does it take?

The procedure usually takes approximately 2 hours.

## How do I prepare for the procedure?

You may be invited to a pre admission clinic prior to your admission date, to prepare you for your procedure.

Normally you will be admitted to hospital the day before or the morning of the procedure.

If you haven't already had investigations at the pre admission clinic, you may need to have a chest X-ray, a heart tracing (ECG), routine blood tests and a breathing test.

You will be given an antiseptic wash to use before the procedure to help prevent infection. You will be informed when to stop eating and drinking prior to the procedure.

## Will it be successful?

This type of surgery is usually successful in correcting the defect. However, it is important to understand that the defect will be replaced by a scar, and in some cases there will remain some residual minor deformity.

Your surgeon will discuss this with you in more detail before the procedure.

## What are the benefits of having the procedure?

While many patients are able to accept and live happily with the shape of their chest others may lack in self-confidence and have a negative self-image. Corrective surgery may benefit these patients and improve their quality of life.

## What are the risks involved?

As with any surgery there is a risk of complications.

There is a risk of infection to the incision site and a risk of bleeding. There is also a risk of collapsing a lung (pneumothorax) during the procedure. If this happens you may require treatment to re-inflate the lung.

Any risks involved with the surgery will be discussed with you in more detail before you sign a consent form.

## What alternatives do I have?

This depends on the severity of the defect.

Many people choose to have no treatment for Pectus Excavatum / Carinatum.

Some defects can be improved by wearing a brace or using a vacuum bell.

The injection of cosmetic fillers has been used in the past but is no longer recommended.

In younger patients a less invasive procedure (Nuss procedure) may be feasible.

Your doctor would be happy to discuss any alternative treatments if they are applicable to you.

## What can I expect after the procedure?

After the procedure you may be nursed on a high dependency unit for a day or so before returning to the ward. You will have your heart rate, blood pressure, oxygen level and wound site checked regularly. Any drains from the wound are usually removed within a couple of days. Staff will inform you when you are able to eat and drink.

If you have had a metal bar inserted it may be removed at a later date.

## When can I resume normal activities?

You should be able to go home 3 – 5 days after your surgery. You will be given advice on how to care for the wound and what to do if you notice any redness, swelling or discharge. In some cases, you may be discharged with a drainage tube and will be asked to return to have this removed. You should not drive for 6 weeks following surgery and you should take about 2 months off work. You must avoid any contact sports or heavy lifting for several months after the surgery to ensure all bones are healed. You will be reviewed as an outpatient within 6 weeks. This advice will be discussed in more detail before you go home.

## For further information visit:

<http://www.royalwolverhampton.nhs.uk>

<http://www.pectus.org/>

If you require a copy of this leaflet in any other format or language please contact us quoting the leaflet code and the language or format you require, Mi 1195514.

# How to Contact us

## **Cardiothoracic Ward/ B8**

2nd Floor  
Wolverhampton Heart and Lung Centre  
New Cross Hospital  
Wolverhampton  
West Midlands  
WV10 0QP  
Telephone 01902 694306 / 694307

## **Cardiothoracic Wound Clinic / B3**

1st Floor / Outpatient Department  
Wolverhampton Heart and Lung Centre  
New Cross Hospital  
Wolverhampton  
West Midlands  
WV10 0QP  
Telephone 01902 307999 ext 6731  
(Monday – Friday 09.00-16.00hrs)

Additional Information is available from:

## **Patient Liaison Service (PALS)**

New Cross Hospital  
Tel: 01902 695362. Mobile 07880 601085  
Pager:1463 (Dial 01902 307999 and ask the switchboard operator to connect you to the pager).  
Website: [PALS@rwh-tr.nhs.uk](mailto:PALS@rwh-tr.nhs.uk)



If you require this document in an alternative format e.g., larger print, different language etc., please inform one of the healthcare staff.

#### Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਦਸਤਾਵੇਜ਼ ਹੋਰ ਰੂਪ ਉਦਾਹਰਨ ਵਜੋਂ ਵੱਡੀ ਛਪਾਈ, ਵੱਖਰੀ ਭਾਸ਼ਾ ਅਲਿਖਤ ਵਿੱਚ ਚਾਹੀਦਾ ਹੋਵੇ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਕਿਸੇ ਸਿਹਤਸੰਭਾਲ ਕਰਮਚਾਰੀ ਨੂੰ ਬੇਨਤੀ ਕਰੋ।

#### Polish

Aby uzyskać niniejszy dokument w innym języku lub formacie, np. pisany dużą czcionką, itp., prosimy skontaktować się z przedstawicielem personelu medycznego.

#### Russian

Если данный документ требуется Вам в альтернативном формате, например крупным шрифтом, на другом языке и т.п., просьба сообщить об этом одному из сотрудников здравоохранения.

#### Lithuanian

Jeį pageidaujate šį dokumentą gauti kitu formatu, pvz., padidintu šrifto, išverstą į kitą kalbą ir t. t., praneškite apie tai sveikatos priežiūros darbuotojui.

#### Kurdish

ئەگەر ئێمە بەلگەنامەیە بە شیوازیکی دیکە دەخوازیت بۆ نمونە چاپی گەورەتر، زمانیکی دیکە هتد. تکایە یەکنێک لە کارمەندانی سەرپەرشتی تەندروستی ناگادار بکەر. هه.

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