



# The Rowan Suite

World Class Private Heart & Chest Care

## Percutaneous closure of an Atrial Septal Defect / Patent Foramen Ovale

Hole in the heart



Information for Patients & Families

**This leaflet has been written to provide information about undergoing closure of a defect in one or more of the heart's four chambers (Percutaneous closure of an Atrial Septal Defect or Patent Foramen Ovale). We hope it answers some of the questions or concerns you may have about the procedure. It is not intended to replace talking with medical or nursing staff.**

### ***What are the defects in your heart?***

There are several types of holes in the heart. These are called Atrial Septal Defects (ASD), Patent Ductus Arterious (PDA) and Patent Foramen Ovale (PFO). Prior to birth a foetus receives oxygenated blood directly from the mother through a 'shortcut' in the heart. This shortcut usually closes at birth or shortly thereafter. The defects are holes in the heart that have not closed properly.

### ***How is percutaneous closure of these defects done?***

Previously open heart surgery was necessary to close these defects. Now for many patients there is a less invasive method. You will be given a general anaesthetic and will be asleep during the procedure. Prior to the procedure, you will be awake but sedated and the doctor may insert a probe in our mouth and pass it down your throat in order to examine your heart prior to closing the defect (known as a Trans-oesophageal echo or TOE).

The procedure is to close the defect and this is usually performed through blood vessels in the groin. You will be given a local anaesthetic to numb the area and a puncture is made in the groin and a thin tube called a catheter is inserted through the blood vessel towards the heart. A special dye that can be seen on x-ray is injected through the tube to enable the doctor to examine the heart and the defect.

The defect is measured and the appropriate size of closing device is fed up through the tube until it sits either side of the defect.

Once the doctor is satisfied that the device is properly sited, it is released and implanted in the heart. The tube and imaging probe are then removed. The puncture site in the groin will heal and does not require stitches.

### ***How long does the procedure take?***

The procedure usually takes between one to two hours.

### ***Will I have any pain following the procedure?***

Once you recover from the anaesthetic you may notice a slightly sore throat caused by the imaging probe. This usually resolves after a day. If you experience any pain you should inform the staff.

### ***How do I prepare for the procedure?***

You will usually come into hospital the day before the procedure. It is helpful if you shave your right groin (crease at the top of your right leg) before you come in. You will be informed when to stop eating and drinking prior to the procedure.

### ***What are the benefits of having the procedure?***

Some people feel breathless or have palpitations as a result of having a hole in the heart. Some people have no symptoms. Larger defects can lead to a stroke and heart failure in later life. Closure of the defect is aimed at preventing these problems.

### ***Will it work?***

The procedure is performed regularly in this hospital and is usually very successful in closing the defect.

### ***What are the risks involved?***

The risk of complications varies from patient to patient depending on individual heart conditions. It is usual to experience bruising to the leg at the place where the tubes are inserted.

Serious complications are exceptionally rare but include a stroke and dislodgement of the closing device. Your individual risks will be discussed with you in more detail before you sign a consent form.

### ***Are there any alternatives?***

This depends on where the defect is and how large or small it is. Some people may require surgery which requires an incision to be made through the breastbone to repair the defect. Having no treatment for your heart defect may lead to problems in later life such as an irregular heartbeat, heart failure or a stroke.

### ***What can I expect after the procedure?***

Once the procedure is finished you will be taken back to the ward. You will need to rest on your bed for a few hours with your leg flat and until you have recovered from the anaesthetic.

The nurse looking after you will observe the puncture site and monitor your blood pressure and heart rate regularly. You will have an x-ray of your chest and a scan of your heart the day after the procedure.

### ***Will I be able to feel the device?***

The device is designed to remain permanently in your body and you will not be able to feel it or be aware of it.

### ***When can I resume normal activities?***

You may be able to go home the day after your procedure following your chest x-ray and scan. You will be able to return to work within 1 week but this varies depending upon the type of job you do. You should avoid heavy lifting for 1 week after the procedure. You should not drive for 24 hours after the procedure. This advice will be discussed with you in more detail before you go home.

You will usually be seen in the outpatient department approximately four months after the procedure.



**For further information visit:**

- [www.lhch.nhs.uk](http://www.lhch.nhs.uk)
- [www.nhs.uk](http://www.nhs.uk)
- [www.bhf.org.uk](http://www.bhf.org.uk)

Or contact the British Heart Foundation information line on 0300 330 3311.

**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.**

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<p><b>如果您想索取一份以其他語文或形式（如大字體）編印成的資料傳單，請致電 0151 600 1257 向我們查詢，並說明您所需要的形式和語文。</b></p>
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