

# Percutaneous patent foramen ovale (PFO) closure

Your doctor has recommended a procedure called a patent foramen ovale (PFO) repair.

You might not have heard this medical term before and may be feeling unsure about the nature of the procedure.

This information sheet outlines what the procedure is and what risks are involved.

After you read this information sheet, you might still have questions. If you do, please contact our team. We're here to help.

You will have further monitoring in recovery or CCU and the usual stay is one night.

If your doctor has advised the need for PFO repair, any of the following may also be required:

**Echocardiogram**—an ultrasound that uses soundwaves to form a picture of the heart (see separate information sheet).

**Right heart catheter**—a soft balloon catheter that records the pressure in the lungs and heart (see separate information sheet).

**Angiogram**—a catheter that is passed into each coronary artery while a series of video pictures are taken using x-rays and a contrast medium (x-ray dye). This measures the size of the heart and how well it is pumping (see separate information sheet).

## 1. What's a PFO repair?

The foramen ovale is an opening in the atrial septum that is supposed to be there before a baby is born and then close after birth. Prior to birth, the opening allows blood to flow between the atria (heart chambers) in the fetus. In about one in four births, the hole doesn't close and becomes a patent (open) foramen ovale.

If the opening doesn't close properly after birth, then blood or emboli can cross from the right atrium to the left atrium.

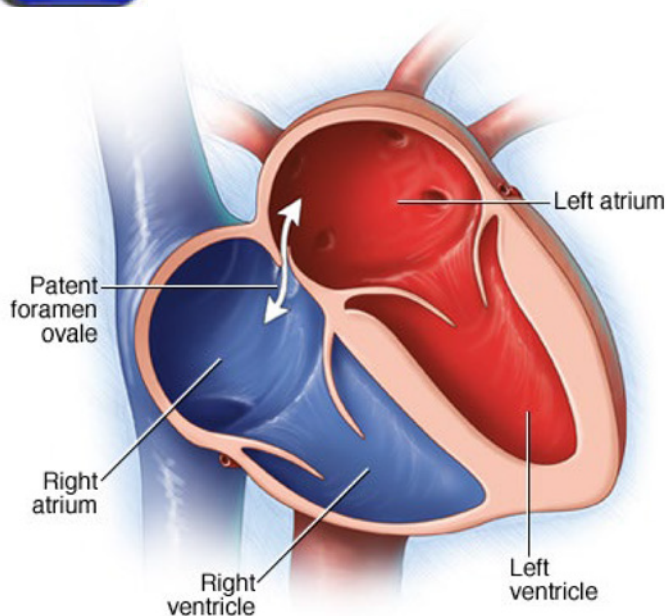
The procedure starts with an intravenous line (IV) being put into your arm. You will receive an injection of local anaesthetic before a catheter (a very fine tube) is placed into a vein in your groin or wrist. Sometimes a sedative will also be given.

Your doctor will repair the hole by putting a permanent artificial device into the defect. The device that closes the hole is called a septal occluder and acts as a plug. It will be passed through the catheter, advanced into your heart and placed into the defect.

Once your doctor is happy with the placement, the catheter will be removed and the entry site will be closed.



One type of  
Septal Occluder



© Mayo Foundation for medical education and research. All rights reserved.

Sunshine Coast University  
Private Hospital  
3 Doherty St, Suite 17  
Birtinya, Queensland  
Australia 4575

Birtinya  
604/11 Eccles Blvd, (5th floor)  
Birtinya, Queensland  
Australia 4575

Buderim Private Hospital  
12 Elsa Wilson Drv,  
Buderim, Queensland  
Australia 4556

Noosa  
111/90 Goodchap St,  
Noosaville, Queensland  
Australia 4566

Gympie  
71 Channon St  
Gympie, Queensland  
Australia 4570

Hervey Bay  
1/17 Hershel CT  
Urraween, Queensland  
Australia 4655

## 2. What kind of risks are associated with this procedure?

Any kind of procedure carries some element of risk, often very small and rare.

Your doctor has balanced the benefits and risks of carrying out the test against the benefits and risks of not proceeding. If your doctor has recommended this procedure, they believe there is benefit to you going ahead.

It's important you understand the risks involved so you can make an informed decision.

Here are the most commonly reported risks and complications associated with a percutaneous PFO closure.

### Common risks and complications (more than 5% of cases)

- Minor bruising at the puncture site
- A higher lifetime risk from exposure to radiation
- Abnormal heart rhythm that continues for a long time—this may need an electric shock to correct
- Major bruising and swelling (haematoma)
- Bleeding around catheter site
- High or low blood pressure
- Sore throat from the anaesthetic tube or echo probe

### Rare risks and complications (less than 1% of cases)

- Stroke or transient ischaemic attack (TIA)—this may cause long term disability

- Incomplete closure of the defect—this may require surgery
- An allergic reaction to the x-ray dye
- Embolism—a blood clot may form and break off from the catheter which will be treated with blood thinning medication
- Fever, headache or migraine
- Injury to the artery, veins or nerves in the groin or neck—this may require surgery
- Tear of oesophagus, vein or heart (from the camera)—this may be life threatening and may require surgery
- Clots in the leg (deep vein thrombosis or DVT) with pain and swelling—rarely, a part of the clot may break off and go into the lungs
- Device infection—this will need open heart surgery and antibiotics
- Dislodgement of the septal occluder which may require open heart surgery to repair
- Puncture of the heart with a collection of blood around the heart—this will require surgery to repair
- Death as a result of this procedure is rare

### Our commitment to you

As a patient of Oceanside Cardiology, you can be assured we will always strive to act in your best interests and we will only recommend tests & procedures we believe will benefit you.

Everyone has questions, and we want to answer yours. Please contact your doctor to discuss any concerns you might have.

Sunshine Coast University  
Private Hospital  
3 Doherty St, Suite 17  
Birtinya, Queensland  
Australia 4575

Birtinya  
604/11 Eccles Blvd, (5th floor)  
Birtinya, Queensland  
Australia 4575

Buderim Private Hospital  
12 Elsa Wilson Drv,  
Buderim, Queensland  
Australia 4556

Noosa  
111/90 Goodchap St,  
Noosaville, Queensland  
Australia 4566

Gympie  
71 Channon St  
Gympie, Queensland  
Australia 4570

Hervey Bay  
1/17 Hershel CT  
Urraween, Queensland  
Australia 4655