

Pericardiocentesis

Cardiology Department

Patient Information Leaflet

Introduction

You have been given this leaflet as your doctor has suggested you would benefit from having a **Pericardiocentesis**. This leaflet gives more information on what will happen to you before and after the procedure. It is designed to make sure that you know as much as possible about the procedure before you agree to it and sign the consent form.

What is a Pericardiocentesis

Pericardiocentesis, or a pericardial tap, is a procedure to remove fluid from the pericardium, the sac surrounding the heart. Performed using a needle and a thin catheter guided by ultrasound (or X-ray), it's used to treat a pericardial effusion (excess fluid), especially in cases of cardiac tamponade, where the fluid pressure restricts the heart's ability to beat effectively. The fluid is drained to relieve pressure on the heart, and the needle may be replaced by a catheter for continued drainage.

Why do I need a Pericardiocentesis?

To relieve pressure on the heart, when fluid buildup is severe enough to affect its function, a condition called cardiac tamponade.

Consent

We must seek your consent for any procedure or treatment beforehand which will be a two-stage process.

Stage one will be with your doctor in a clinic setting where they will explain the risks, benefits and alternatives where relevant, before they ask for your written consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

Stage two will be a re-confirmation when you attend for the procedure and will be undertaken by a healthcare professional (either physiologist or the operator)

What are the benefits of having this procedure?

Pericardiocentesis can be a life-saving procedure.

To obtain a sample of pericardial fluid for analysis to identify the cause of the effusion.

What are the risks of having this procedure?

As with all procedures or operations, there is an element of risk. In most cases this is very small. These risks include:

- This is usually an emergency procedure but also can be an elective procedure
- There is a very small risk of death (in the order of 1 in 1000 cases)
- Emergency heart surgery is very rarely required during or soon after the procedure if serious problems are found or develop (in the order of 1 in 1000 cases)
- There is a small risk of damage to the heart (perforation), blood vessels, or other nearby structures.
- It may be performed as a medical emergency if the fluid buildup is rapid and causes severe heart dysfunction.
- Discomfort as local anaesthetic injected into chest.

On the day of the procedure

- You can have a light breakfast before 7am on the morning of the procedure.
- Drink as normal.
- Bring all medication with you.
- Please take your normal medications, with a sip of water, on the morning of your procedure- **see the note regarding Warfarin, anticoagulation**
- Have a bath or shower
- Remove jewellery, contact lenses, make-up and nail varnish. Wedding rings can remain but will be taped for the procedure.
- Be prepared to stay overnight, pack a small bag
- Bring a book or something to do whilst you wait
- Bring reading glasses.
- Avoid bringing large sums of money or valuables

- **Please arrange for a relative or a friend to take you home after your procedure by car/taxi. You will not be able to drive home or use public transport alone. Your relative or friend will need to stay with you overnight.**

Medication

What to do if on Warfarin or newer anticoagulants (NOACs):

- **Stop anticoagulation** (Apixaban, Dabigatran, Edoxaban or Rivaroxaban) **48 hours before** the procedure
- Metformin - stop taking 48 hours before the procedure and 24 hours after the procedure
- **Warfarin**, please contact the day case unit 01384 456111 Ext 2573 or the Anticoagulation team Ext 2380 to discuss when to take your last dose.

- **Diabetes**

- Eat and drink as normal.
- Take your diabetic medication as normal.
- Stop taking Metformin 48 hours before procedure and 24 hours post procedure
- Remember to bring all your diabetes medication, dextrose tablets and blood testing equipment
- Your blood glucose will be tested by a finger prick when you arrive and monitored
- Usually, we will try to put you first on the list

What happens on the day:

- We will provide you with a gown and to change into.
- A small canula (tube) will be inserted into a vein in your arm, this will allow us to give medication

- Pre-procedure tests will include blood pressure, temperature, ECG, height and weight
- Please advise us if you have any allergies
- A healthcare professional will discuss your stage two consent process. Please use this opportunity to raise any concerns that you may have

What happens during the procedure

The procedure is performed in a dedicated Xray room within the Cardiology Department. You will be cared for by a team of doctors, nurses, radiographers and cardiac physiologists.

- You will lie on an X-ray bed
- Your ECG, blood pressure and oxygen levels will be monitored throughout the procedure
- You may be given a sedative to help you relax during the procedure.
- We may give you oxygen using a face mask
- An ultrasound machine is used to locate the fluid collection and guide the procedure.
- Your chest area will be cleaned with a cold antiseptic, and you will be covered with sterile drapes.
- After injecting the area with local anaesthetic, you will feel a sharp scratch and stinging sensation for a few seconds, then the area will become numb.
- A thin needle is inserted through the chest wall into the pericardial space.
- Fluid is withdrawn through the needle.
- A thin plastic tube (catheter) is advanced through the needle and may be left in place to allow for continued drainage of the fluid.
- The fluid can be drained into a bag connected to the catheter, this may be left attached to allow fluid to drain slowly whilst on the recovery ward.
- Very occasionally some patients experience chest discomfort during the procedure. If this occurs, please make

us aware so we can administer pain relief that may be required

- You may experience some extra 'bumps' in the chest, but they will pass.
- You will be taken back to recover in the day case unit or ward

What happens after the procedure?

- You will be taken back to recover in the day case unit
- Your heart rate, blood pressure and wound site will be monitored.
- You will be given something to eat and drink.

What happens after the Pericardiocentesis?

The doctor will discuss the results with you.

Going Home Advice

Please arrange for a relative or a friend to take you home after your procedure by car/taxi. You will not be able to drive home or use public transport alone. Your relative or friend will need to stay with you overnight.

You are advised not to drive for 48 hours post procedure.

Keep your dressing dry and remove 24 hours post procedure.

If taking any anticoagulation medication (rivaroxaban, dabigatran, apixaban, edoxaban or warfarin) these can be restarted the following day.

Diabetic patients

You will be discharge when you are eating and drinking normally and your blood glucose is at a safe level.

However, if you are unwell with:

- **Continuous** vomiting /diarrhoea or high fever
- **Unable** to keep food down for 4 hours or more
- **High** blood glucose (>15mmol)
- **High** ketones (0.6mmol)

How to contact us:

Cardiology Day Case Unit

Russells Hall Hospital

Dudley

DY1 2HQ

Tel: 01384 456111 Ext 2573

Wednesday & Thursday 08.00 - 20.00

Cardiology Ward

Russells Hall Hospital

Dudley

DY1 2HQ

Tel: 01384 456111 Ext 2138

Additional information:

British Heart Foundation

Tel: 0808 802 1234

www.bhf.org.uk