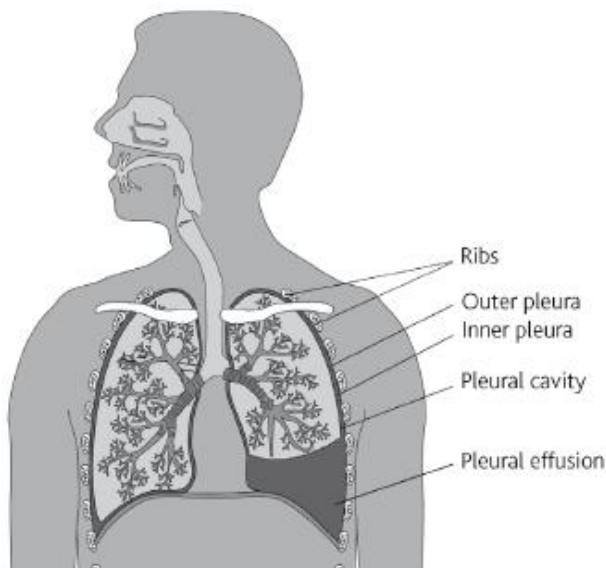


INFORMATION FOR PATIENTS

Indwelling pleural catheter

Why do I need an indwelling pleural catheter?

Fluid has collected in the space between the lung and the chest wall. In most people this space is very small and almost dry. However, in certain diseases fluid can build up in this space and stop the lungs from expanding properly each time you breathe. This makes you short of breath. The fluid is called a pleural effusion or pleural fluid (see picture below).



Anatomy of the chest showing pleural effusion/fluid.

What can be done to help me when fluid collects?

Draining away the fluid helps relieve breathlessness for a short period, but the fluid often re-collects, making you short of breath again. While it is possible to have repeated drainage of fluid with a new tube each time it collects, it can be uncomfortable and means many inconvenient trips to hospital. An indwelling catheter is a way of allowing fluid to be repeatedly drained without you having to come to the hospital and have repeated uncomfortable procedures.

What is an indwelling pleural catheter?

An indwelling pleural catheter is a specially designed small tube which allows fluid to be drained from around your lung easily and painlessly.

The pleural catheter is a soft flexible tube, smaller than a pencil, which remains inside the chest and passes out through the skin. There is a valve on the outer end of the tube to prevent fluid leaking out of the tube when it is not in use. This avoids the need for a new procedure and local anaesthetic injections every time fluid needs to be drained. The drainage can be performed by you, your carer or with the help of a district nurse – whichever suits you.

An example of what the catheter may look like once in place is shown below.



How is the indwelling catheter put in my chest?

The tube will be put into your chest in the treatment room on the Medical Day Case Unit at King's Mill Hospital. You will be asked to lie in a comfortable position on either your right or left side (depending on which side the fluid is).

Once you are resting comfortably, the skin will be cleaned with an alcohol solution to kill any bacteria. This fluid often feels cold.

An anaesthetic is then injected into the skin to numb the place where the indwelling catheter will be placed. This can sting a little initially, but this quickly fades.

Your doctor will then make two small cuts in the numb area of skin and gently open a path for the indwelling catheter. This should not be painful, although you may feel some pressure or tugging.

One cut is for the catheter to pass through the skin, and the second is for it to be passed into the chest. The indwelling catheter is then gently eased into the chest.

Will it be painful?

Local anaesthetic is injected into the skin so that you do not feel the drain going in.

Pain relieving medications are given to control any pain. At the end of the procedure, the chest may feel bruised or sore for about a week. We will provide you with pain relieving tablets to ease this discomfort.

Is there anything I need to do before the procedure?

Please let your doctor or the Medical Day Case Unit staff know if you have diabetes or are taking medication to thin your blood. Warfarin and clopidogrel will need to be discontinued for five days before the procedure. Ticagrelor and Prasugrel will need to be stopped for seven days. Rivaroxaban, apixaban or edoxaban tablets will need to be discontinued for 48 hours. Enoxaparin or fondaparinux injections will need to be discontinued for 24 hours.

How long do I have to stay in hospital?

Provided there have been no problems, you can usually go home shortly after the procedure. We usually monitor you for a short time afterwards.

Very occasionally patients need to stay in hospital overnight. The indwelling catheter may then be connected to a drainage bottle to ensure all the fluid is removed before you go home.

How does the drain stay in position?

Indwelling pleural catheters are designed to be a permanent solution to the problem of pleural fluid (although they can be removed if they become unnecessary).

There is a soft cuff around the tube, which is positioned under the skin, to which the skin heals so the drain is made secure. Two stitches will be put in when your tube is inserted.

These can be removed a week after the procedure by the district nurse or practice nurse, or at your outpatient appointment.

Who will drain the fluid from my tube once it is in place?

Drainage of the fluid is a straightforward procedure. There are a number of ways this can be undertaken. Our nurses will be able to teach you or a carer how to drain the fluid. This can then be done in the comfort of your own home using specially designed drainage system (shown below).

You will be given illustrated instructions on how to do this which take you through the procedure step by step. We will provide you with the equipment required initially to drain the fluid. The community nursing team will then provide any additional drainage bags and dressings.

If you or your carer are not able to drain the fluid, then we will arrange for a district nurse to do this for you. We will make the arrangements.



Example of a chest drainage control unit and collection bag.

After your catheter is inserted, some of the fluid will be drained straight off. More will be drained in the following days. Some patients need daily drainage while others require only weekly drainage or even less often.

Fluid can be drained as often as is necessary. With time, fluid often needs to be drained less frequently.

We can put some sterile talcum powder down the tube at 10 days in some patients which increases the chance of us being able to remove the tube.

Are there any risks with indwelling catheter insertion?

In most cases, the insertion of a chest drain and its use in treatment is a safe procedure. However, like all medical procedures, pleural catheters can cause some problems (all of these can be treated by your doctors and nurses):

- Most people get some pain from their indwelling catheter in the first week. We can provide you with pain relieving medication to control this.
- Sometimes indwelling catheters can become infected, although this is uncommon (affecting about one in 50 patients). Your doctor will thoroughly clean the skin before putting in a chest drain to try to prevent this. We will teach you how to keep your catheter clean. Tell your doctor if you feel feverish or notice any increasing pain or redness in the skin around the drain.
- Very rarely, during insertion, the chest drain may accidentally damage a blood vessel and cause serious bleeding. This probably only affects about one in 500 patients. If it does happen, it can be a serious problem which may require an operation.

Are there any risks associated with long term indwelling catheter use?

Generally, indwelling pleural catheters are very well tolerated in the long term. The main risk is infection entering the chest down the tube.

This risk is minimised by good catheter care and hygiene. We will teach you how to look after your catheter.

Please let your doctor or nurse know if you develop a lump, or any pain, around your catheter in the weeks after it is inserted. If this problem does develop, your doctor will advise you on appropriate treatment. This is most commonly a problem in patients with mesothelioma, where cancer tissue can affect the area around the indwelling catheter.

Can I wash and shower normally?

Initially after insertion there will be a dressing placed on the catheter, and we advise you to keep this dry until the stitches are removed seven days later.

Providing the site is then clean and dry, you will be able to bathe and shower normally. After a month it is even possible to go swimming.

When is the indwelling catheter taken out?

Indwelling pleural catheters are designed to remain in position permanently. Often, the fluid drainage from the chest dries up and the catheter is no longer needed.

In this situation the catheter can be removed as a day case procedure on the Medical Day Case Unit.

What should I do if something happens to the tube?

Before discharge from hospital, you will be given an information sheet detailing after-care following tube insertion.

If you would like any further information about this procedure, or if any problems arise, you should telephone the nurse specialists on:

- Telephone: 01623 622515, extension 4726
- Mobile: 07823 789359.

Your feedback is encouraged. We are keen to make indwelling pleural catheter care as straightforward and as comfortable as possible. Please feel free to make any suggestions for improvements to your doctors or nurses.

Further sources of information

NHS Choices: www.nhs.uk/conditions

Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns, or complaints, and will ensure a prompt and efficient service:

King's Mill Hospital: 01623 672222

Newark Hospital: 01636 685692

Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know.

You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you. External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them. If you require a full list of references for this leaflet, please email sfh-tr.patientinformation@nhs.net or telephone 01623 622515, extension 6927.

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