

Department of Respiratory Medicine

Indwelling pleural catheter (IPC)

Information for patients

What is an indwelling pleural catheter?

An indwelling pleural catheter is a specially designed small tube to drain fluid from around your lungs easily and painlessly whenever it is needed. It avoids the need for repeated chest tube insertion every time the fluid collects. The drainage can be performed by either you on your own or with the help of a nurse. The tube is soft, flexible and about the size of a pencil in diameter. One end remains inside the chest and the other passes out through the skin. There is a one-way valve on the end which prevents fluid leaking out of the tube and air leaking in.

Why do you need an IPC?

The pleural space consists of two thin membranes, one lining the lung and the other lining the chest wall. These layers lie very close together and are almost usually dry but in your case fluid has collected in this space so that the lung cannot function properly making you short of breath.

What can be done to help?

Draining away the fluid can help relieve the breathlessness for a short period but the fluid often builds up again. Whilst it is possible to have repeated drainage with chest tube insertion, this is uncomfortable, carries risks and requires repeated hospital admissions. The indwelling catheter is a way of allowing fluid to be drained repeatedly without the painful drainage procedures and without having to come to hospital.

How is the indwelling catheter put in?

The tube will be put in the hospital. You will be offered pain-killing medication to make the procedure more comfortable and some antibiotics to reduce the risk of infection.

You will be asked to either sit or lie in a comfortable position. Sedative medication will be given through a needle in the back of your hand to make you slightly sleepy. This is not an anaesthetic and it is common for you to remember some of the procedure despite this sedative injection.

Your skin will be cleaned with a liquid cleaner to kill any bacteria which often feels cold. An anaesthetic is then injected into the skin to numb the place where the indwelling catheter will go. This can sting but the discomfort passes off quickly.

The 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 will 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 eased into the chest.

Will it be painful?

Local anaesthetic is injected into the skin before the drain is put in so that you do not feel the drain going in. You are also given painkilling medication to control any pain. At the end of the procedure your chest may feel 'bruised' or 'sore' for about a week but you this can be controlled with painkilling tablets.

How long do I stay in hospital?

Your hospital stay will be between three to five days.

How does the drain stay in position?

Indwelling catheters are designed to be a permanent solution to the problem of pleural fluid (though they can be removed if they are no longer needed). There is a soft cuff around the tube which is positioned under the skin to which the skin heals making the drain more secure.

Two stitches will be put in when your tube is inserted. These will be removed by your nurse after 10 to 14 days.

Who will drain the fluid from my indwelling catheter?

Drainages of the fluid is a straightforward procedure. There are a number of ways this can be done.

The Pleural Nurse Specialist or ward nurses will be able to teach you, a relative or a friend, how to drain the fluid so that it can be done in the comfort of your own home. You will be given illustrated instructions on how to do this which clearly takes you through the procedure step by step.

Alternatively we will arrange for a member of the District Nurse team to do this for you at home.

Otherwise you could visit the outpatient department where the Pleural Nurse Specialist or one of the clinic staff undertakes drainage for you.

How often does the fluid need to be drained?

When your catheter is inserted the doctor will remove most of the fluid from your chest cavity at the same time. The rate of re-accumulation varies between people and some patients need daily drainage whilst others require only weekly drainage or less. You can drain fluid as often or as frequently as is needed but you will be guided by your nurse or doctor.

Are there any risks with indwelling catheter insertion?

In most cases the insertion of a chest drain and its use is routine and safe. However, like all medical procedures, chest drains 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. Painkilling medication will control this
- Sometimes indwelling catheters can become infected but this is uncommon (affecting about 1 in 50 patients). Your doctor will clean the area thoroughly before putting in the chest drain to try and prevent this and we will teach you how to keep your catheter clean. Tell your doctor if you feel feverish or notice any increasing pain or redness around the chest drain.
- Very rarely, during the insertion, the chest drain may accidentally damage a blood vessel and cause serious bleeding. This probably only affects about 1 in 500 patients. Unfortunately, if it does happen it is a serious problem which requires an operation to stop it.

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

Generally indwelling catheters are very well tolerated.

- The main risk is infection entering the chest down the tube. The risk is minimised by good catheter care and hygiene. You will be taught how to look after your catheter. The site should be checked regularly for signs of infection (redness, swelling, oozing, pain or fever) – if this does occur you should inform your District Nurse, GP or Pleural Nurse Specialist as soon as possible so that you can be assessed and if necessary receive treatments with antibiotics.
- Sometimes cancer tissue can affect the area around the indwelling catheter. Please let your doctor know if you develop a lump, or any pain, around your catheter in the weeks after it is inserted.

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 stitch is removed seven days later. Providing the site is then clean and dry, you will be able to bath and shower normally.

When is the indwelling catheter taken out?

Indwelling catheters are designed to remain in position permanently. However, sometimes 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.

What should I do if something happens to the tube?

On discharge from hospital you will be given information dealing with after care following tube insertion.

How to contact us / further information

If you would like any further information about this procedure, or if any problems arise, you may telephone either:

- Elaine Reid – Pleural Nurse Specialist - 01223 245151 ask for bleep 156-2197
- Sandy Bailey – Secretary to Dr Sivasothy – 01223 216646

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Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk

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Cantonese

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Bengali

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