

Tunnelled indwelling pleural catheter (TIPC)

A patient's guide

What is a tunnelled indwelling pleural catheter?

A tunnelled 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 painful injections and insertion/removal of chest tubes every time fluid needs to be drained. The drainage can be performed either by you on your own or with the help of a nurse, whichever is easier for you.

The catheter is a soft flexible tube that is thinner 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.

Why do you need a tunnelled indwelling pleural catheter?

The pleural space consists of two thin membranes - one lining the lung and the other lining the chest wall. Between these layers there is usually a very small space which is almost dry. In your case fluid has collected in this space so that the lung cannot work properly, making you short of breath.

What can be done to help me when this happens?
Draining away the fluid helps relieve breathlessness for a time, but the fluid often recollects making you short of breath again.

Whilst it is possible to have repeated drainage of fluid in this way, it can be uncomfortable and means many trips to hospital. The indwelling catheter is a way of allowing fluid to be repeatedly drained without you having to come to the hospital and having repeated uncomfortable fluid drainage procedures.

How is the catheter put in my chest?

The tube will be put into your chest in a room close to the Thoracic Day Ward. You will be shown to a bed and a nurse will take your temperature, pulse and blood pressure and ask you some questions.

You will be asked to either sit or lie in a comfortable position by your doctor. An ultrasound scan of your chest will be done to establish a suitable position for the drain. This is completely painless.

Once you are resting comfortably, the skin will be cleaned with an alcohol fluid. This fluid often feels cold. A local anaesthetic is then injected into the skin to numb the area where the catheter will go. This can feel mildly uncomfortable but this pain passes off quickly.

Your doctor will then make two small cuts in the numb areas of skin and create a path for the 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 positioned into the chest.

Will it be painful?

The local anaesthetic is used so that you do not feel the drain going in. Painkilling medications are given to control any discomfort. At the end of the procedure the chest may feel 'bruised' or 'sore' for about a week. We will provide you with pain-killing tablets to relieve this discomfort.

How long do I have to stay in hospital?

Provided there have been no problems the procedure is done as a day case and after a few hours on the Thoracic Day Ward you will be able to go home. It is advisable for someone to drive you home.

How does the drain stay in position?

Indwelling catheters are designed to be a permanent solution to the problem of pleural fluid (although they can be removed if they are no longer needed). There is a soft band around the tube under

the skin, around which the skin heals and so keeps it securely in position and prevents it from falling out.

Two stitches will be put in when your tube is inserted. One of these will be removed after seven days, whilst the other can stay in place indefinitely.

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

that this can be undertaken.

A specialist nurse 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.

If, however, you or your relative/friend are unable to drain the fluid, then we will arrange for a member of our team or a district nurse to do this for you. If this is not possible then we can arrange drainage on our Day Ward.

We will make these arrangements so you will not need to organise any of this for yourself.

How often can I drain fluid and how often do I need to do this?

When your catheter is inserted, most of the fluid from your chest will be removed at the same time. The rate the fluid comes back varies between people and some patients need daily drainage while others require only weekly drainage or less.

You can drain fluid as often or as infrequently as is needed. We will discuss with you how often this may need to be done.

Are there any risks with indwelling catheter insertion? In most cases the insertion of a chest drain and its drainage is a routine and safe procedure.

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 discomfort from their indwelling catheter in the first week. We will provide you with pain killing medication to control this.

- Sometimes indwelling catheters can become infected but this is uncommon (affecting about one in 50 patients). Your doctor will thoroughly clean the area before putting in a chest drain to try and prevent this and you will be taught how to keep your catheter clean. We will give you phone numbers of whom to contact should you have any problems, for example, fever, increasing pain or redness around the catheter.
- Very rarely, during the insertion, the chest drain may accidentally damage a blood vessel and cause serious bleeding. This probably only affects about one in 500 patients. Unfortunately, if it does happen it can be a serious problem which requires an operation to stop it. Very, very, rarely such bleeding can be fatal. Of course, everything possible will be done to avoid this.

- Are there any risks associated with long term tunnelled indwelling catheter use? Generally indwelling catheters are 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.
- Sometimes cancer tissue can affect the area around the indwelling catheter. Please let your doctors 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.

Can I wash and shower normally?

Initially after insertion there will be a dressing placed on the catheter and we ask 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. After a month it is even possible to go swimming.

Follow-up

After the catheter is inserted, you will be followed up at regular intervals, as required, at Papworth Hospital.

When is the tunnelled indwelling catheter taken out? Indwelling catheters are designed to remain in position permanently. However, sometimes the fluid in the chest dries up and the catheter is no longer needed. In this situation the catheter can be removed as a day care procedure on the Thoracic Day Ward.

Your feedback is encouraged

We are keen to make indwelling catheter care as straightforward and as comfortable as we can. Please feel free to make any suggestions for improvement to your doctors or nurses.

If you would like any further information about this procedure or if any problems arise, you may telephone: Gerry Slade, Lung Nurse Specialist: 01480 364889 or Mark Slade (secretary: 01480 364917).

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For more information about Papworth Hospital please visit our website www.papworthhospital.nhs.uk

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