

# Percutaneous Abscess Drainage

## Introduction

This leaflet tells you about the procedure known as percutaneous abscess drainage. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

Whether you are having the percutaneous abscess drainage as a planned or an emergency procedure, you should have sufficient explanation before you sign the consent form.

Radiologists are doctors specially trained to interpret images and carry out more complex examinations. They are supported by radiographers who are highly trained to carry out X-rays and other imaging procedures.

## What is percutaneous abscess drainage?

An abscess is a collection of pus or infected fluid, and it can make you feel very ill. In the past, drainage of an abscess inside your chest or abdomen would have required an open operation. Now it is possible to drain abscesses by inserting a fine plastic tube called a drainage catheter, into the abscess through the skin, with only a tiny incision. This procedure is called percutaneous (through the skin) abscess drainage.

## What are the options or alternatives?

In some cases when small enough, abscesses may respond to antibiotic medication to try and treat the infection. However, this often does not

work and more definitive intervention is needed. The main alternative to percutaneous drainage is an open operation.

## Why do I need percutaneous abscess drainage?

Other tests that you probably have had performed, such as an ultrasound or a CT scan, will have shown that you have an abscess, and that it is suitable for draining through a small tube, rather than by an operation. Abscesses can make you very ill, and if they occur after surgery, can delay your recovery. Although antibiotics can help, they are rarely effective against a large abscess. However, once pus has been drained, this can be sent to the laboratory for tests to show which is the best antibiotic to treat the remaining infection.

## Who has made the decision?

The Consultant in charge of your care will have come to this decision after reviewing your imaging with a Radiologist. However, you will also have the opportunity to discuss your options with your doctor, considering both the risks and benefits of the procedure. Ultimately, the decision whether or not to proceed is yours.

## Who will be performing the percutaneous abscess drainage?

A specially trained doctor called a Radiologist. Radiologists have special expertise in using x-ray and scanning equipment, and also in interpreting the images produced. They need to look at these images while carrying out the procedure.

Radiographers and Radiology Nurses will be present in the room to assist during the procedure and they will introduce themselves at the start of the procedure.

Occasionally Radiologists and specialist practitioners in training will perform part or all of the procedure under the supervision of an experienced Consultant Radiologist. Student Radiographers or Medical Students may also be present.

## Where will the procedure take place?

Generally, in the Medical Imaging Department, either using a CT scanner or an ultrasound machine to guide the needle.

## How do I prepare for percutaneous abscess drainage?

You may need to be an inpatient in the hospital, although occasionally procedures can be performed as an outpatient / day case.

You will have had some blood tests performed before the procedure to check that you do not have an increased risk of bleeding.

You are asked not to eat for 4 hours prior to the procedure. You may drink a little water.

If you have any allergies or you have previously reacted to intravenous contrast medium, you must let the doctor know. Intravenous contrast medium is the injection we give you during some scans.

If you are diabetic, please contact the Medical Imaging Department on **01392 402336** **selecting option 2, in-patient enquiries, option 6** Interventional Procedures.

If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) then these may need to be stopped or altered. Please contact the Medical Imaging Department on 01392 402336 selecting option 2, in-patient enquiries and then option 6 for Interventional Procedures. Examples of these medication include:

- Warfarin, Phendione, or Acenocoumarol
- Clopidogrel, Ticagralor or Aspirin
- Non-steroidal anti-inflammatory drugs (NSAIDS) (e.g Ibuprofen, Naproxen)
- Dabigatran (Pradaxa), Rivaroxiban (Xarelto), Apixaban (Eliquis), or Edoxaban (Lixiana)

Other medication should be taken as normal.

A pregnancy test may be performed on arrival.

## What actually happens during a percutaneous abscess drainage?

You will lie on the x-ray or scanning table, in the position that the Radiologist has decided is most suitable. You need to have a needle put into a vein in your arm, as a precaution in case any intravenous medicine or fluid needs to be given during or after the procedure. You may also have a monitoring device attached to your chest and finger, and may receive oxygen through small tubes in your nose.

The Radiologist will keep everything as sterile as possible, and will wear a theatre gown and operating gloves. Your skin will be cleaned with antiseptic, and then most of the rest of your body covered with a theatre towel. The Radiologist will use the ultrasound machine or the CT scanner to decide on the most suitable point for inserting the fine, plastic drainage catheter. Then your skin will be anaesthetised with local anaesthetic, and a fine needle inserted into the abscess.

What happens next will vary in different situations. The pus may simply be drained through that needle, or a slightly larger needle or plastic tube, which is then withdrawn altogether. Alternatively, it may be necessary to place a larger drainage tube into the abscess and attach it to the skin so that pus can continue to drain for some days.

## Will it hurt?

You may experience some discomfort for a short period of time, but any pain you have should be controlled with painkillers.

When the local anaesthetic is injected, it will sting to start with, but this soon wears off, and the skin and deeper tissues should then feel numb. Later, you may be aware of the needle or the wire and catheter passing into the abscess, as the wall of the abscess is often inflamed this can be painful. There will be a Nurse, or another member of clinical staff, standing next to you and looking after you. If the procedure does become painful for you, then they will be able to arrange for you to have more painkillers through the needle in your arm. Generally, placing the catheter in the abscess only takes a short time, and once in place it should not hurt at all.

## How long will it take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. It may be over in 20 minutes, or very occasionally it may take longer than 90 minutes. As a guide, expect to be in the Medical Imaging Department for about an hour altogether.

## What happens afterwards?

You will be taken back to your ward on a trolley. Nurses on the ward will carry out routine observations, such as taking your pulse, blood pressure and temperature, to make sure that there are no problems. You will generally stay in bed for a few hours, until you have recovered.

If the drainage catheter has been left in your body for the time being, then it will be attached to a collection bag. It is important that you try and take care of this. You should try not to make any sudden movements, for example getting up out of a chair, without remembering the bag, and making sure that it can move freely with you. It may need to be emptied occasionally, so that it does not become too heavy, but the nurses will want to measure the amount in it each time.

## What will happen to the results?

A report of the procedure will be recorded on your electronic patient record immediately and also sent to your specialist within 48 hours.

## How long will the catheter stay in, and what happens next?

These are questions which only the doctors looking after you can answer. It may only need to stay in a short time. It is possible that you will need further scans or x-rays to check that the abscess has been drained satisfactorily. You will be able to lead a normal life with the catheter in place. When the catheter is taken out, this does not hurt at all.

## Are there any risks or complications?

Percutaneous abscess drainage is a very safe procedure, and there are very few risks or complications that can arise. Perhaps the biggest problem is being unable to place the drainage tube satisfactorily in the abscess. If this happens, your doctors will arrange another method of draining the abscess, which may involve surgery.

Rarely, you may get a shivering attack (a rigor) when bacteria from the abscess passes into the blood stream during the procedure, but this is generally treated satisfactorily with antibiotics.

Very occasionally an operation is required, but if the percutaneous drainage had not been attempted, then this operation would have been necessary anyway.

There is small chance of inducing bleeding from small vessels, this will normally stop by itself but occasionally a blood transfusion or procedure to stop the bleeding is needed.

In the abdomen there is a small chance that adjacent bowel can become damaged, in that case an operation might become necessary.

**Despite these possible complications, the procedure is normally very safe, and will most likely result in an improvement in your medical condition.**

## Finally...

Some of your questions should have been answered by this leaflet, but remember this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.

## Contact us

If you found reading your leaflet difficult, you do not understand what it means for you, or if you have any queries or concerns you can contact us on: **01392 402336** and we can talk it through.

## How to get to the Royal Devon & Exeter Hospital at Wonford

**Please refer to the enclosed "Welcome to the Medical Imaging Department" leaflet or use the Trusts website for the latest information:**

**[www.royaldevon.nhs.uk/our-sites](http://www.royaldevon.nhs.uk/our-sites)**

For more information on the Medical Imaging Department, please visit our website:

**[www.royaldevon.nhs.uk/services/medical-imaging-radiology-x-ray/medical-imaging-eastern-services/](http://www.royaldevon.nhs.uk/services/medical-imaging-radiology-x-ray/medical-imaging-eastern-services/)**

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