

*The* ROYAL MARSDEN

NHS Foundation Trust

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# Percutaneous image guided drainage

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**Interventional Radiology**

**Patient Information**



**NHS**



## Introduction

Your doctors have recommended that you have a procedure known as percutaneous image guided drainage. This leaflet explains what the procedure involves and the possible risks and complications you may experience – your doctors will have discussed these with you previously. If you are still unsure about the benefits of having the procedure, please ask.

Whether you are having the percutaneous image guided drainage as a planned or an emergency procedure, it is important that you fully understand what is involved before you sign the consent form.

## What is a percutaneous image guided drainage?

In the past, drainage of fluid or an abscess inside your body would have required an open operation. Now it is possible to drain fluid (ascitic) or an abscess directly by inserting a fine plastic tube, called a drainage catheter, into it through the skin (percutaneous), under ultrasound or CT (computerised tomography) guidance. This is typically performed through a very small incision and is generally done under local anaesthesia.

## Why do I need image guided drainage?

The symptoms of fluid (ascites) and abscess can be very distressing. The abdomen becomes swollen and distended, which can be uncomfortable and painful. You may find it difficult to get comfortable, sit up or walk. It can make you feel tired or breathless and may cause a feeling of sickness (nausea) or make you sick (vomiting). You may also suffer indigestion, reduced appetite or fever.

## Who has made the decision?

The doctor in charge of your care, and the interventional radiologist carrying out the drainage will have discussed your situation, and feel that this is the best treatment option.

However, your opinion will also be considered, and if after discussion with your doctors you do not want the procedure carried out, you can decide against it.

### Who will be doing the drainage?

A doctor called an interventional radiologist. These doctors are able to see what they are doing by using ultrasound, CT and MRI. They will be assisted by radiology nurses and radiographers.

### Where will the procedure take place?

This procedure is usually carried out in the x-ray (radiology) department, using either a CT or ultrasound scanner to guide the doctor.

### Are there any risks or complications?

Percutaneous drainage is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise. Perhaps the biggest problem is being unable to place the drainage tube satisfactorily into the fluid or abscess. If this happens, other methods of draining the fluid or abscess will be explained to you.

On rare occasions, you may get a shivering attack (a rigor) during the procedure, but this is generally treated with antibiotics. The procedure is normally very safe and will almost certainly result in an improvement in your medical condition.

### How do I prepare for the procedure?

- You will need to have some blood tests beforehand (within 2-7 days before your procedure day) to check that you do not have an increased risk of bleeding
- You **must not** eat for six hours before the procedure, although you will be allowed to drink clear fluids up until two hours before the procedure

- If you have any allergies, you **must** let your doctor know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans), then you must also tell your doctor about this
- If you are taking any medication that thins your blood such as aspirin, tinizeparin, clopidogrel, rivaroxaban and warfarin, you must contact the radiology department
- You must ensure that you have a responsible person to take you home in a car or taxi, not on public transport (this is because you may have been given a sedative during your procedure).

## Can I bring a relative or friend?

You may bring someone with you, but for safety reasons they cannot accompany you into the x-ray room.

## When you arrive at The Royal Marsden

Often a drainage is carried out as an inpatient, although on some occasions it is done as day case.

If you are not an inpatient already, please report to the day care area as specified on the letter or as informed by your team or nurse specialist looking after you.

- On arrival you will have a small tube (cannula) placed in a vein in your arm, so that you can be given fluids and receive medication while in the x-ray department
- You will be allocated a bed, although you may not go there until after the procedure
- You will be asked to change into a hospital gown
- When the time comes for your procedure, you can either walk to the x-ray department or be taken there on a trolley
- When you arrive in the x-ray department, a nurse will greet you and the radiologist will explain the procedure and discuss it with you before you sign the consent form. If you have any questions, this is a good time to ask the radiologist.

## What happens during the procedure?

- You will lie on the ultrasound or CT scanning table, in a position that the radiologist has decided is most suitable
- Your skin will be cleaned with antiseptic around the chosen site, and will then be 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 – your skin will then be anaesthetised with local anaesthetic
- The radiologist will make a small cut and insert the plastic tube into the abdominal fluid – the tube is then attached to a drainage bag
- The ascitic fluid or abscess drains from the abdomen into the drainage bag. It may be necessary to secure the drain with two stitches and a dressing.

The length of time that the drain needs to remain in place depends on the amount of fluid that needs to be drained off. However, your doctor and nurse will be monitoring you closely on the ward and will decide when the drain needs to be removed.

There is a possibility that the ascitic fluid may build up again and drainage may need to be carried out more than once.

## Will it hurt?

Some discomfort may be felt in the skin and deeper tissues during injection of the local anaesthetic. After this, the procedure should not be painful. There will be a nurse or another health care professional, close by throughout the procedure. You will be awake during the procedure and able to tell the radiologist if you feel any pain, or become uncomfortable in any other way. If the procedure does become painful, the nurse will be able to arrange for you to have some painkillers through the cannula in your arm.

## How long will it take?

Every patient is different, and it is not always easy to predict, however expect to be in the x-ray department for about one hour.

## What happens afterwards?

- You will be taken back to your ward or day care area on a trolley
- Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems
- They will also look at the skin entry point to make sure there is no bleeding from it
- You will generally stay in bed for a few hours, until you have recovered
- You may be allowed home on the same day, but depending on your circumstances, you may be kept in hospital overnight
- In most cases you will be able to eat and drink normally after the procedure.

## Contact details

If you have any questions or concerns about your procedure, or you are unable to attend for this appointment, please call:

Radiology Department **020 7808 2571.**  
(Monday to Friday, 8.30am – 4.30pm)

Alternatively, please call:

### **The Royal Marsden Macmillan Hotline:**

**020 8915 6899** (available 24 hours a day, 7 days a week)

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

## Further information

The Royal College of Radiologists  
*[www.rcr.ac.uk](http://www.rcr.ac.uk)* for general information about radiology departments

Macmillan Cancer Support  
*[www.macmillan.org.uk](http://www.macmillan.org.uk)*  
Support line: 0808 808 0000  
(Monday to Friday, 9am – 8pm)

National Institute for Health and Clinical Excellence  
*[www.nice.org.uk/guidance](http://www.nice.org.uk/guidance)*







## References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre  
Freephone: 0800 783 7176  
Email: [patientcentre@rmh.nhs.uk](mailto:patientcentre@rmh.nhs.uk)

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.



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