

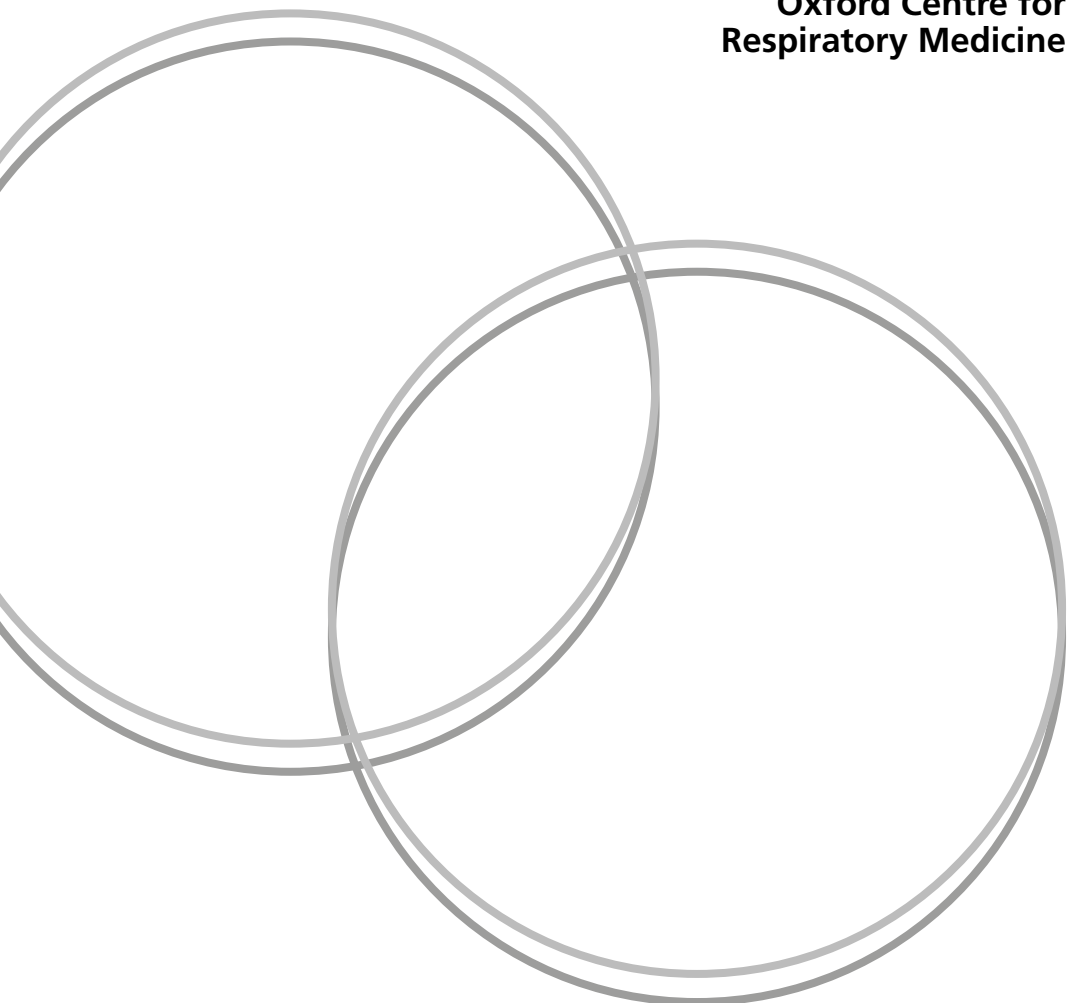


Oxford University Hospitals  
NHS Foundation Trust

# Pleural Aspiration

**Information for patients**

Oxford Pleural Unit  
Oxford Centre for  
Respiratory Medicine



Provisional appointment date and time .....

## **Important information about your pleural aspiration**

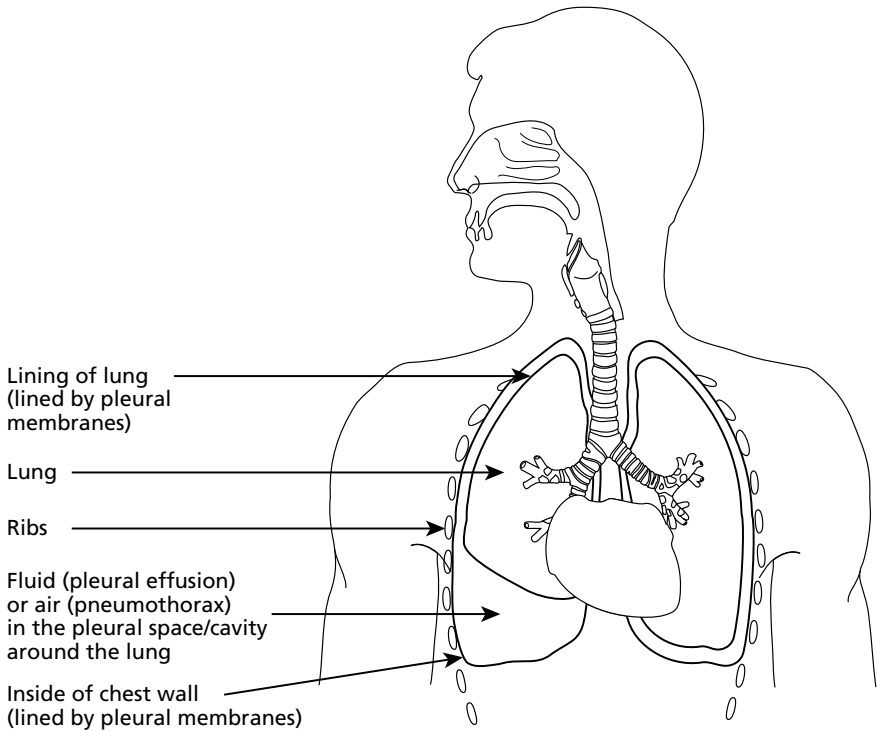
- Tell your doctor about all the medication you take and any medical conditions you have.
- Tell us if you are on any blood thinning medications – these are normally stopped before your procedure. It is important that you continue to take any other medications (including those for high blood pressure).
- Arrange for someone to take you home from the procedure.
- After the procedure, contact your doctor if you have increasing shortness of breath, increasing chest pain or cough up any blood.

## **What is a pleural aspiration?**

A pleural aspiration is a simple procedure which involves passing a small needle through your chest wall, to remove fluid or air from the space between your lung and the inside of your chest wall (the pleural space).

## Why do I need a pleural aspiration?

We have recommended that you have a pleural aspiration because fluid or air has collected in your pleural space, which should not be there. This is called a pleural effusion (collection of fluid) or pneumothorax (collection of air). These can both cause problems with breathing and can stop your lungs from working properly.



Laboratory analysis of any fluid taken from your pleural space can help us to find out the cause of your problem and work out the best way of treating it. Removal of fluid or air from the pleural space can also be an important treatment for breathlessness.

## **Is there an alternative test that I can have instead of the pleural aspiration?**

Your doctor can do X-rays and CT scans of your lungs. These tests will give additional information about your lungs. However, pleural aspiration gives your doctor very specific information, by obtaining samples; there is usually no alternative way of doing this.

## **How should I prepare for my pleural aspiration?**

Please make sure we have your correct telephone number. We will contact you by telephone a few days before your procedure to confirm that you are still able to come. If we are unable to reach you, your appointment will be given to someone else who is waiting for this procedure.

At present, all patients are required to have a COVID-19 test prior to attending for your procedure. This is for the protection of you and other patients. We will provide information on how to arrange this test.

**Please let us know if you may be pregnant, as this may affect the medicines we give you.**

On the day of your pleural aspiration, before your procedure, we will need details of **all** your medications (including any over the counter remedies), allergies and any medical conditions. **It is important to let us know in advance if you take blood thinning medications, as we temporarily stop these before your procedure.** You should take all your other medications as usual on the morning of the procedure.

The tables overleaf explain what to do with your medications. Please contact us if you are not sure what to do.

## Blood thinning medications

Medication	Instructions
Warfarin	Usually stopped 5 full days before the procedure. You will need an 'INR' blood test 1-2 days before your procedure to make sure your 'INR' is below 1.5, otherwise we will need to cancel your procedure.
Aspirin	Do not take on the morning of the procedure.
Clopidogrel (Plavix) Dipyridamole (Persantin) Ticagrelor (Brilique)	Usually stopped 7 full days before the procedure.
Apixaban (Eliquis) Dabigatran (Pradaxa) Rivaroxaban (Xarelto)	Usually stopped 2 full days before the procedure.
Dalteparin (Fragmin) injections	<b>Full ("treatment") dose</b> injections are usually stopped 1 full day before the procedure. <b>Low ("prophylactic") dose</b> injections, often given to inpatients, are usually continued as normal

## All other medications

Medication	Instructions
All other medications	Please take as normal.

Please bring all of your medications with you when you come for the procedure. You should also bring any glasses that you need for reading. Please do not wear jewellery or nail varnish or bring in any valuables.

## What will happen on the day?

If you are not already an inpatient, please come to the reception desk at Theatre Direct Admissions, on Level 1 of the John Radcliffe Hospital, at the time you have been given.

When you arrive, a nurse will greet you and take your blood pressure, heart rate and temperature. They will also ask you questions about your medical history, medications and any allergies you might have.

The procedure will be explained to you again and you will have the opportunity to ask any questions you might have. You will be asked to sign a consent form to confirm you are happy with the procedure to go ahead. The nurses will then ask you to change into a hospital gown.

The pleural aspiration procedure will take place in a procedure room or on the ward (with screens or curtains for privacy). You will be asked to either sit or lie on your side in a comfortable position.

The doctor will usually do an ultrasound scan to find where best to perform the procedure. This involves putting some gel on your chest and using a hand-held ultrasound device to roll over your skin. The ultrasound uses sound waves to create an image on a screen. It is not painful. The procedure is usually carried out on the side of your chest, below your armpit.

Once you are resting comfortably, the skin over the area where the pleural aspiration will be carried out will be cleaned with an alcohol-based liquid, containing cleaner, to kill any bacteria. This fluid often feels cold. A local anaesthetic will then be injected into your skin, to numb the area. This may sting to begin with, but the pain will disappear quickly.

Your doctor will then pass a small needle through your numb skin, into the pleural space. This should not be painful, although you may feel some pressure. Fluid or air will then be removed from your chest.

The length of time this takes will be determined by the volume of fluid or air that is within your chest. It may be between 10 to 30 minutes.

## Are there any risks?

Pleural aspiration is generally a very safe procedure, with serious complications being rare. However, as with all medical procedures, there are certain risks.

### **Pain**

- The local anaesthetic will sting briefly, but the aspiration procedure itself should not cause you pain. If you do feel anything, we can give you more local anaesthetic.
- You may get some chest discomfort or feel like coughing if we need to take larger volumes of air or fluid off your chest. This usually settles after a few minutes, but we may occasionally give you painkillers or oxygen to help relieve these symptoms.
- After you are discharged from hospital (or return to your ward), your chest may be sore for a little while. You may need some mild painkillers to control this.

### **Infection**

- Rarely, an infection may develop at the site of the procedure. If this occurs it can usually be treated with antibiotics, but it may require a stay in hospital. Very rarely, such infections can be serious and will need to be treated with an operation.

### **Bleeding**

- Rarely, this procedure might cause bleeding into the pleural space at the site where the procedure was carried out. This often settles without any further procedure, but might (very rarely) require an operation, if the bleeding will not stop.

### **Lung damage**

- There is a small risk of damage to the lung, which could cause air to leak into the space around the lung. This usually requires no specific treatment, but could mean you need to be admitted to hospital, where you may need a small tube to be inserted through your skin into this collection of air to drain it.

## Will it be unpleasant?

Local anaesthetic is injected into your chest wall, so that you don't feel the aspiration procedure. If needed, additional painkillers can be given to control any discomfort.

## What happens after the pleural aspiration?

The pleural aspiration procedure usually lasts up to 30 minutes. Afterwards, you will be monitored by a nurse in our Recovery Area for a further 30 minutes. You may need to have a chest X-ray to confirm that there have been no complications and to see how much fluid or air remains in your chest.

After this time, as long as you feel well and aren't returning to another ward, you will need to be collected from **Theatre Direct Admissions** (Level 1, John Radcliffe Hospital) by a friend or relative. On the day, we will call them to update them on the suitable collection time. It is essential that someone accompanies you home, either driving you home or traveling with you in a taxi. You should not go home on public transport after this procedure. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home.

You will have a dressing over the area where the procedure was carried out. This can be removed the following day. Please contact your GP if you have bleeding that requires you to change the dressing or have any spreading red areas around the wound.



## Getting the results

The results of your pleural aspiration will not be available immediately. It takes several days for the specimens that have been collected to be analysed. You will usually be given an appointment in the Chest Clinic to discuss the results with your doctor, about two weeks after the procedure. If you are already an inpatient, your doctor will discuss the results with you on the ward.

If you have not received an appointment for the Chest Clinic by the end of the week after your procedure, please contact your Chest doctor's secretary.

Sometimes the pleural aspiration does not establish a firm diagnosis and further tests may be required. One cause of a pleural effusion is cancer and this website gives details of other procedures to investigate and treat this possibility –

**<https://mypleuraleffusionjourney.com>**. Your doctor will discuss if these are necessary.

## How to contact us

If you have any questions or concerns, please contact:

**Theatre Direct Admissions** (Level 1, John Radcliffe Hospital)

Tel: **01865 221 050** or **01865 221 055**

(Monday to Friday, 8.00am to 3.00pm)

Outside these hours please call the Hospital switchboard

Tel: **01865 741 166**

Ask for either the On-call Respiratory doctor or the Chest Ward.

If you are not staying in hospital as an inpatient, when you are ready to be discharged you can be collected from Theatre Direct Admissions.





## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust  
[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



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