

Respiratory medicine

# Pleural aspiration

## Information for patients, relatives and carers

### Introduction

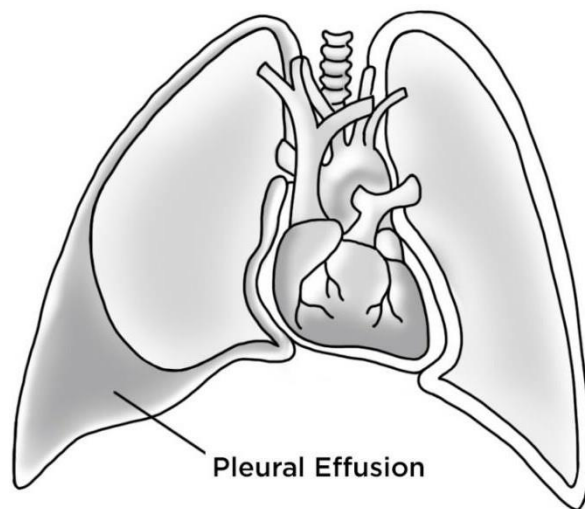
This leaflet explains what pleural aspiration is and how to prepare for the procedure. If you have any questions about the information below, please ask your clinical team (see contact details on page 4).

### What is pleural aspiration?

A pleural aspiration is a simple procedure which involves passing a small needle through the chest wall. This removes fluid from the space between the lung and the inside of the chest wall (the pleural space).

### Why do I need a pleural aspiration?

We have recommended this because fluid has collected in your pleural space which should not be there. This is called a pleural effusion (a collection of fluid), and it can cause problems with breathing and stop the lungs working properly.



Laboratory analysis of any fluid taken from your pleural space can help find out the cause of your problem and help us work out the best treatment plan.

Removal of fluid from the pleural space can also improve breathlessness.

### How do I prepare for my pleural aspiration?

Please ensure we have your correct telephone numbers (**including your mobile phone number**) and, ideally, an email address for you. We will contact you by telephone a few days before your procedure to confirm your attendance. If we can't reach you, we will give your appointment to someone else who is waiting.

Please tell us as soon as possible if you will need an interpreter.

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Bring any glasses you need for reading, as you will need to read and sign a consent form, either in a digital or paper format.

Bring all your medications with you. We need details of **all** your medications, allergies and any medical conditions.

It is important to let us know in advance if you take blood-thinning medications as we usually temporarily stop these before your procedure. The details below explain what to do with any blood-thinning medications. Please contact us if you are not sure what to do.

### **Blood-thinning medication instructions**

<b>Warfarin</b>	Usually stopped 5 full days before the procedure. You will need an 'INR' blood test 1 to 2 days before the procedure to make sure your 'INR' is below 1.5. Please tell us if you are on warfarin and why, as in some situations, we might give you an alternative shorter-acting agent to take instead, in the lead-up to your procedure.
<b>Aspirin</b>	Do not take on the morning of the procedure
<b>Clopidogrel</b>	Usually stopped 7 full days before the procedure
<b>Dipyridamole</b>	Usually stopped 7 full days before the procedure
<b>Ticagrelor</b>	Usually stopped 7 full days before the procedure
<b>Rivaroxaban</b>	Usually stopped 2 full days before the procedure
<b>Apixaban</b>	Usually stopped 2 full days before the procedure
<b>Dabigatran</b>	Usually stopped 2 full days before the procedure
<b>Dalteparin (injections)</b>	Usually stopped 1 full day before the procedure
<b>Enoxaparin (injections)</b>	Usually stopped 1 full day before the procedure

You should take all your other medications as usual on the morning of the procedure.

### **What will happen on the day?**

If you are not already an in-patient, and are having the procedure at St Mary's Hospital, please come to the reception desk in **Endoscopy, second floor of the Queen Elizabeth the Queen Mother (QEQM) building** at the time you have been given ([Imperial College Healthcare NHS Trust | Hospital map](#)).

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If you are not already an in-patient, and are having the procedure at Charing Cross Hospital please come to **Endoscopy, First floor, pilot block**, at the time you have been given ([Imperial College Healthcare NHS Trust | Charing Cross Hospital site map](#)).

When you arrive, please check-in with our receptionist who will ask a nurse to greet you and take your blood pressure, heart rate and temperature. They'll ask you a few questions about your medical history, medications and any allergies. Please tell us if you might be pregnant.

We will explain the procedure to you again and you will have the opportunity to ask any questions before completing a consent form.

We do pleural aspirations in a procedure room. You will be asked to either sit or lie in a comfortable position by the doctor. The doctor will do an ultrasound scan to confirm the best site to perform the aspiration. They will put some jelly on your chest, which isn't painful, but the jelly might be cold. The procedure is usually done at the side of your chest, below your armpit, or towards your back.

Once you are resting comfortably, we'll clean your skin with an alcohol-containing cleaning solution to kill any bacteria. This fluid often feels cold. We'll inject a local anaesthetic into the skin, to numb the area. This can feel mildly painful, but the pain disappears quickly.

Your doctor will then pass a small needle into the pleural space. This should not be painful, although you may feel some pressure or pulling. The fluid will then be removed from the chest.

How long the procedure takes depends on the volume of fluid taken from the chest – it usually takes between 10 and 20 minutes.

## Are there any risks with this procedure?

Pleural aspiration is generally a very safe procedure and serious complications are rare. The details below apply to all pleural procedures:

### **Pain**

Some patients may experience a degree of pain, but this is rarely severe. The local anaesthetic stings briefly but the aspiration procedure should not be sore. We can give you more local anaesthetic if you need it. You may get some chest discomfort or coughing, which can happen when we drain larger volumes of air or fluid from the pleural space. This usually settles over a few minutes, but we occasionally give painkillers to treat this. After discharge from hospital, your chest could be sore for a little while and you might need some mild painkillers.

### **Infection**

Rarely, patients who have a pleural aspiration might have an infection at the site of the procedure. If this happens, we can usually treat it with antibiotics but you may need to stay in hospital. Very rarely these infections can be serious and require an operation.

### **Bleeding**

Rarely, patients can develop bleeding. This often settles without any further intervention but might (very rarely) need another procedure to control it.

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## 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 needs no specific treatment but could require admission to hospital. We might also need to insert a small tube through the skin into this collection of air to remove it.

There is also a small risk that the needle we use to drain fluid makes a hole in (punctures) another organ, such as the spleen or liver. This is exceptionally rare and does not usually cause any harm.

## What happens after the pleural aspiration?

A nurse will monitor you after your procedure for up to 30 minutes. We often perform a chest x-ray after the procedure. After a short period of monitoring, provided you feel well, you can be collected and taken home. We suggest that someone either drives you home or travels with you in a taxi if possible.

## Getting the results

If the doctors are sending fluid for diagnostic tests, please note that the results of your pleural aspiration will not be immediately available. It takes several days for the biopsy to be analysed. We will usually give you an appointment in the chest clinic to discuss the results with your doctor about 7 to 14 days after the procedure. Please contact the pleural team two weeks after the procedure if you have not received an appointment or any updates. Occasionally, we might need to do another procedure to give you a diagnosis.

## How to contact us

If you have any questions or concerns leading up to the appointment, please contact the pleural team on **07876138418** or [imperial.pleural@nhs.net](mailto:imperial.pleural@nhs.net) (Monday to Friday, 09.00 to 17.00).

**If you have had a pleural aspiration and experience marked breathlessness, pain, dizziness or light-headedness outside of these hours, please go to your local A&E, and take this leaflet with you.**

## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

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Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: [imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

## Wi-fi

Wi-fi is available at our Trust. For more information visit our website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)

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