

Oxford Centre for Respiratory Medicine

Ultrasound guided pleural biopsy

Information for patients



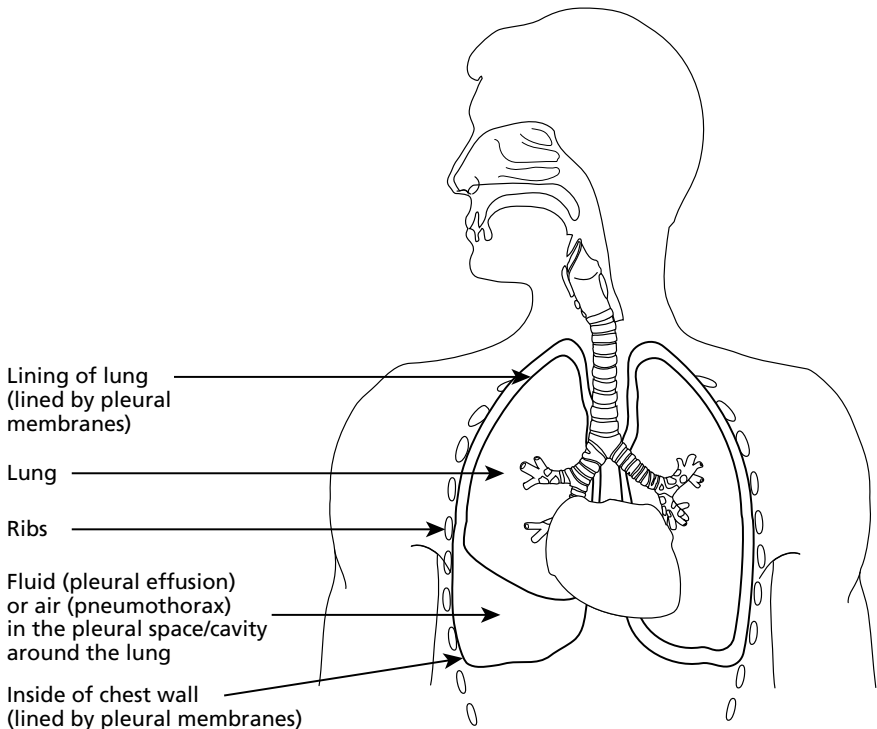
Provisional appointment date and time.....

Important information about your ultrasound guided pleural biopsy

- Do not eat or drink anything for 6 hours before your procedure. You can take any medicines with a sip of water up until 2 hours before your procedure.
- Tell your doctor about all the medication you take and any medical conditions you have.
- Tell us if you are on any blood thinning or diabetes 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 bring you in and take you home from the hospital, before and after the pleural biopsy. You should also not be alone overnight after your biopsy.
- If you are given sedation medicine during the procedure, for 24 hours afterwards you should not drive, return to work, operate machinery, drink alcohol, sign legal documents or be responsible for small children.
- After your biopsy, contact your doctor if you are short of breath, have increasing chest pain or cough up any blood.

What is an ultrasound guided pleural biopsy?

An ultrasound guided pleural biopsy involves taking small samples (biopsies) of the lining of the inside of your chest (the pleural membranes). A special biopsy needle is passed through the skin and the biopsy samples are collected. We use an ultrasound scanning machine to help us accurately target the needle. These samples are then looked at in a laboratory, to help find out the cause of your problem and the best way of treating it.



Why do I need a pleural biopsy?

Your doctor has recommended that you have a pleural biopsy because they feel this is the best way to find out more about your illness. This decision is made carefully, with your best interests in mind. It is your decision whether you wish to have the procedure.

Is there an alternative test that I can have instead of the pleural biopsy?

There are alternative ways of getting biopsies from the chest. One of these uses a special camera called a thoracoscope, during a procedure called thoracoscopy. Thoracoscopy is a slightly more invasive test, and not all people are suitable for this procedure. We have carefully considered which test would be most suitable for you, but would be pleased to discuss the alternatives with you if you wish.

How should I prepare for my pleural biopsy?

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.

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

During the procedure we may need to give you some sedation medicine, to make you sleepy and more relaxed. In case we need to do this, you will need to follow these instructions for fasting (starving) before you come in to hospital:

Do not eat or drink anything for 6 hours before the procedure. You can have sips of water only up to 2 hours before the procedure, if you need to take any medicines. Please make sure that you follow these fasting instructions. Fasting is very important before a procedure which might involve sedation. If you have anything in your stomach whilst you are under sedation, it might come back up while you are sedated and get into your lungs. We

will need to cancel the procedure if these instructions are not followed.

It is also better not to smoke before the procedure, because this can reduce how much oxygen your blood can carry.

On the day of the biopsy, before the 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 or diabetes medications, as we will need you to temporarily stop taking these before your procedure. You should take all your other medications as usual on the morning of the procedure – these should be taken with a sip of water at least two hours before you arrive.

If you take medication for high blood pressure, it is particularly important that you continue taking your tablets. We also ask that you get your blood pressure checked at your GP practice two or three days before the procedure, to make sure that it is well controlled.

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

Diabetes medications

Medication	Instructions
Diabetes tablets e.g. glibenclamide, gliclazide, glimepiride, glipizide, tolbutamide, metformin, pioglitazone and sitagliptin.	Do not take on the morning of the procedure.
Insulin injections	The dose of your insulin will usually need to be either reduced or stopped on the morning of your procedure. If in doubt, please don't take your insulin but bring it with you along, with all your other medicines.

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	Usually stopped 1 full day before the procedure.

All other medications

Medication	Instructions
All other medications (including those for high blood pressure)	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?

Please come to the reception desk in Theatre Direct Admissions, on Level 1 at the John Radcliffe Hospital, at the time you have been given. You should expect to be in the hospital for approximately 4 hours.

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 will be asked to sign a consent form to confirm you are happy with the procedure to go ahead.

You will be given a hospital gown to change into and the nurse or doctor will insert a cannula (tiny plastic tube) into your hand or arm, in case we need to give you medication into the vein during the procedure.

When your pleural biopsy is due to start, you will be shown into the procedure room and will be asked to lie on a couch. Your blood pressure, oxygen levels and heart rate will be monitored

using a cuff on your arm, a sensor on your finger and some stickers attached to your chest. You will be given some oxygen into your nose or mouth to keep the oxygen in your blood at a safe level. If required, we can give you medication into the cannula to make you feel sleepy, although we do not normally need to do this.

When we are ready, your doctor will inject local anaesthetic into the skin on your chest wall. This will sting a little at first, but soon numbs the area so you will not feel anything during the examination.

A small cut will then be made in the side of your chest. Using the ultrasound machine, the biopsy needle is then passed through this cut and the biopsy samples are taken. When each sample is taken, you will hear a click – the doctor will demonstrate this sound to you before taking the first biopsy. If you are uncomfortable when the specimens are taken, we can give you further anaesthetic medication. Several biopsies will be taken, usually in the same area, and the procedure usually lasts between 30 and 60 minutes.

At the end of the procedure we will put a sticky dressing over the site, which you can remove two days later. Please keep this dressing clean and dry.

Can anything go wrong?

Pleural biopsy is generally a very safe procedure, with serious complications being rare. Any medical procedure carries a very small risk to life, but for pleural biopsy this is very low indeed (less than 1 in 1,000).

Pain

- The local anaesthetic will sting briefly but the biopsy procedure itself should not be painful. If needed, we can give you further local anaesthetic or sedation medication.
- After you have been discharged from hospital, your chest may be sore for a little while and you might need some mild painkillers to relieve this. Rarely, occasional sharp 'scar pains' can affect the chest for some months afterwards. These are usually very brief and not severe. They do not mean that anything has gone wrong with the procedure.

Infection

- Rarely, an infection might develop at the site of the procedure. If this occurs it can usually be treated with antibiotics, but it may mean you need to come into hospital. Very rarely, such infections can be serious and need to be treated with an operation.

Bleeding

- Rarely, bleeding might develop after the biopsy in the area where the needle was inserted. This often settles without any further procedure, but might (very rarely) need to be treated with an operation.

Lung damage

- There is a small risk of damage to the lung that is near to where the biopsies are taken, which could cause air to leak into the space around the lung. This usually requires no

specific treatment, but could mean you need to come into hospital to have a small tube inserted through your skin into this collection of air, to drain it away.

Will it be unpleasant?

The local anaesthetic which is injected into your chest wall where the small cut will be made means that you should not feel the biopsy needle being inserted. If you do feel any discomfort we can give you additional anaesthetic or painkillers.

What happens after the pleural biopsy?

After the biopsies have been collected, you will be monitored by a nurse in our Recovery Area for two hours. You will also have a chest X-ray to check the area where the biopsies were collected.

After two hours, as long as your X-ray is satisfactory and you feel well, you will be taken to the Transfer Lounge (Level 2, John Radcliffe Hospital) ready to be collected and taken home. Before you leave, the nurse will remove the cannula from your hand/arm.

It is essential that someone accompanies you home, either driving you home or travelling 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 should not be alone overnight after your pleural biopsy, in case you feel unwell.

If you were given any sedative medication during the procedure, you should not drive, work, operate machinery, drink alcohol, sign any legal documents or be responsible for small children for 24 hours after the procedure. This is because the sedation can affect your judgement and behaviour slightly (even if you think you are feeling fine).

Getting the results

The results of your pleural biopsy will not be available immediately. It takes several days for the specimens to be analysed. You will be given an appointment in the Chest Clinic to discuss the results with your doctor about 8-15 days after the procedure. Occasionally, a repeat biopsy procedure is required to get a diagnosis. Please contact your Chest doctor's secretary 1 week after the procedure if you have not received an appointment for the Chest Clinic.

How to contact us

If you have any questions or concerns, please contact:

Theatre Direct Admissions

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

(Monday to Friday, 8.00am to 4.00pm)

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 the:

Transfer Lounge (Level 2, John Radcliffe Hospital)

Tel: **01865 222 848**

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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