

Respiratory medicine

Local anaesthetic thoracoscopy

Information for patients, relatives and carers

Introduction

This leaflet explains what a local anaesthetic thoracoscopy (LAT) is and how to prepare for the procedure. Please feel free to ask our team any questions you have about the information below (see contact details on page 5).

What is a local anaesthetic thoracoscopy (LAT)?

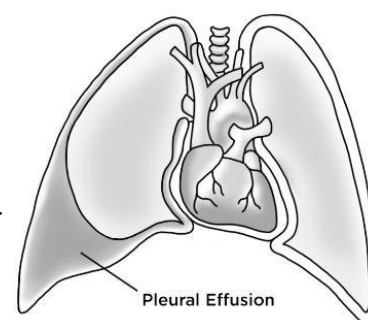
A LAT is a procedure in which a camera is passed between the ribs into the chest. A thorough inspection of the lung and the lining of the lung (pleura) can be done, and biopsies (small samples) of the pleura can be taken for analysis to help us find out the cause of your illness and the best way of treating it.

A LAT can be used for the diagnosis of a fluid collection (pleural effusion) that is not able to be diagnosed by fluid sampling (pleural aspiration) alone. In specific instances, medications such as talc can also be sprayed into the lining of the lung, which aims to prevent the fluid collection from returning.

The procedure is carried out using sedation medicine that will help you relax and will make you sleepy. Local anaesthetic is also used to numb the area where the camera is inserted.

Why do I need a LAT?

Your doctor has recommended for you to have this procedure because they feel that this is the best way to find out more about your condition. This decision is made carefully, with your best interest in mind. It is your decision whether to have the procedure or not.



How do I prepare for my LAT?

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 cannot reach you, your appointment will be given to someone else who is waiting.

Please let us know 48hrs in advance if you will need an interpreter.

You will need a blood test to check that you are not at risk of bleeding. This will usually be done when you see the doctor who suggests you have this test, but it may also be arranged separately.

Bring your belongings for an overnight stay in the hospital in case this is necessary. Also bring any glasses needed for reading, as you will need to read and sign a consent form (even if you have already given digital consent before the procedure on another day).

If your doctor says you are likely to go home the same day, please arrange for someone to bring you in and take you home after the procedure. You should not be alone overnight after your LAT because of the sedation. For 24 hours after the procedure you cannot drive, return to work, drink alcohol, operate machinery or sign legal documents.

We need details of **all** your medications (please bring them with you), allergies and any medical conditions. If you normally take any medication, check with your doctor or nurse when you should take them on the day of the test. Let your pleural doctor or nurse know in advance if you take:

- **insulin or tablets for diabetes**
- **blood-thinning medication** like warfarin, aspirin, or clopidogrel

We'll need to make special arrangements if you take certain medications. We usually temporarily stop blood-thinning medications before your procedure. See the guidance below. Please contact us if you are not sure what to do.

Do not take your diabetic medications on the morning of the procedure, as you'll be fasting.

When to stop taking blood-thinning medications

warfarin	usually stopped 5 full days before the procedure. You will need an INR blood test 1 to 2 days before the procedure to ensure your INR is below 1.5. Please let us know if you are on warfarin and why. In some situations, we may give you an alternative shorter-acting agent to take instead, before your procedure.
aspirin	do not take on the morning of the procedure
clopidogrel	usually stopped 7 full days before the procedure
dipyridamole	usually stopped 7 full days before the procedure
ticagrelor	usually stopped 7 full days before the procedure
rivaroxaban	usually stopped 2 full days before the procedure
apixaban	usually stopped 2 full days before the procedure

dabigatran	usually stopped 2 full days before the procedure
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dalteparin (injections)	usually stopped 1 full day before the procedure
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enoxaparin (injections)	usually stopped 1 full day before the procedure
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What will happen on the day?

1. You need to fast for solids (to not eat any food) for 6 hours before the procedure. You can drink small amounts of clear fluids (up to 170mls per hour) up until your procedure – this includes still water or clear fruit juice (not juice with pulp, not fizzy drinks and not milky drinks).
2. Come to Manvers Ward or the reception desk in Endoscopy, 2nd floor of the Queen Elizabeth the Queen Mother (QEQM) building at St Mary's Hospital at the time you have been given – the pleural nurse will tell you where to go. Map of St Mary's Hospital site: www.imperial.nhs.uk/our-locations/st-marys-hospital/site-map
3. When you arrive, a nurse will greet you. They will:
 - a. take your blood pressure, heart rate and temperature
 - b. ask you questions about your medical history, medications and any allergies.

Please let us know if you may be pregnant.

4. The procedure will be explained to you again. You will have the opportunity to ask any questions. You will be asked to sign a consent form.
5. A small plastic needle (cannula) will be inserted in your arm. This allows the doctors to give you a sedative and pain relief during the procedure. You will also be given some pain medication to swallow before the procedure.
6. You will then be taken through to the procedure room and will be asked to lie on your side on a bed. You will have pillows around you to make you as comfortable as possible.
7. Your blood pressure, heart rate and oxygen levels will be recorded throughout the test and extra oxygen can be given if needed.
8. An ultrasound will be used to locate the fluid. We will make sure there is a safe amount of fluid to carry on with the procedure. The ultrasound will also guide the doctors as to where to insert the camera.

What does the LAT procedure involve?

1. Your skin will be cleaned, and a sterile drape will be placed over your chest.

You will be given some pain relief medicine and a sedative. Then doctors will then use local anaesthetic to numb the area where they will make the small (1cm to 2cm) cut in the side of your chest.

2. A thin tube with a camera (scope) will then be inserted through this cut to allow the doctors to examine the inside of your chest.
3. Pleural fluid will be drained out of your chest and biopsies will be taken. This part of the procedure takes about 30 to 40 minutes. The doctors will then decide how to finish the procedure:
 - a. if the lung looks like it **will reinflate** (after being squashed by the fluid) the team will insert a temporary drain into the chest. This will drain any air and fluid immediately after the procedure. If the team think the fluid is likely to come back later, they **may** also put in a special medical talc to stick the lining of the lung together and try to stop fluid from building up again. If we use talc, you will be admitted overnight.
 - b. if the lung looks like it **will not reinflate** the team will insert a longer-term drain after the procedure and you may be able to go home the same day (please see patient information leaflet about [Preparing for an indwelling pleural catheter \(IPC\)](#)). Your doctor will advise whether you are likely to receive a temporary or longer-term drain before you have a LAT.

What happens after the procedure?

After the procedure you'll be taken to the recovery area and given a drink and biscuits. You'll also be prescribed some pain relief as you may have some discomfort after the local anaesthetic has worn off.

If you've had a temporary drain placed, this will be removed when the air and fluid has stopped draining and then you can go home. This is often on the same day, but some people need an overnight stay. If the doctors have used talc, you will need to stay for at least 1 night in hospital. If you have a long-term drain inserted, you can usually go home the same day.

Any stitches should be removed by the doctors or district nurses after 7 to 10 days for a temporary drain and 10 to 14 days for a long-term drain (the pleural team will arrange this).

If you are going home on the same day, please make sure you have some paracetamol at home in case you have any discomfort over the next 24 hours.

Are there any risks with this procedure?

The procedure is normally very safe and serious complications are rare.

Pain Some patients may experience a degree of pain, but this is rarely severe. The local anaesthetic stings briefly, and you may feel some pressure on your ribs. But the procedure should not be sore. Occasionally some patients feel pain when a biopsy is taken. If this happens, we can give more pain relief. After leaving hospital, your chest may be sore for a little while and you may need some mild painkillers.

Infection	Rarely, patients who have a LAT might have an infection at the site of the procedure. If this happens it can usually be treated with antibiotics, but you may need to stay in hospital. Very rarely such infections can be serious and require an operation.
Lung damage	There is a very small risk of damage to the lung, which could cause air to leak into the space around the lung. If this were to happen, you may need to stay in hospital overnight to allow the punctured lung to heal.
Bleeding	Rarely, patients may develop bleeding. This often settles without any further intervention but might (very rarely) need a further procedure to control it.
Other risks	If medical talc is used, it is quite common to develop a fever after the procedure. This usually settles with paracetamol. Rarely the talc can cause a reaction in the lung and cause breathlessness.

Any medical procedure carries a small risk to life. Very rarely there may be a death because of complications from the procedure. 'Very rarely' means less than one person in 1,000.

Are there any alternatives to this procedure?

The thoracic surgeons can do a similar procedure called a video assisted thoracoscopic surgery (VATS). For this you would need to meet the surgeons in clinic and get a theatre date for the procedure. It would also need a general anaesthetic, which may not be suitable if you have other significant medical conditions. Recovery from a VATS needs at least 1 to 2 nights in hospital.

When will I get the results?

You will be given an appointment at the clinic to get the results of your biopsies about 2 weeks after you are discharged. We can then decide if you need any further treatment. Only very occasionally the biopsy does not give us enough information, and another test may be needed.

When should I get help?

If you've had a thoracoscopy and experience:

- marked breathlessness
- pain
- dizziness
- light-headedness

and cannot contact the pleural team, please go to your local A&E. Take this leaflet with you.

How to contact us

If you have any questions or concerns leading up to your appointment, please contact the pleural team, Monday to Friday between 09.00 and 17.00.

call: **07876 138 418 / 07393 003 019** email: imperial.pleural@nhs.net

Contact pleural consultant Dr Ross / Dr Sinharay, via secretary, Monday to Friday between 09.00 and 17.00

call: **020 3312 7942**

How do I make a comment about my visit?

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**). The PALS team will listen to your concerns, suggestions or queries. They are often able to help solve problems for you.

call: **020 3313 0088** email: imperial.pals@nhs.net

Or, if you need to **complain**, contact the Complaints department.

call: **020 3312 1337 / 1349** email: ICHHC-tr.Complaints@nhs.net

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

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

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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