Ambulatory Management of Pneumothorax after Lung Biopsy

Information for patients

Oxford Pleural Unit
Oxford Centre for Respiratory Medicine
Important reminders about ambulatory pneumothorax drainage devices:

- Wear loose fitting clothes over the top.
- Do not have a bath or immerse the device in water.
- You can remain active but should avoid heavy exertion or lifting.
- If you experience mild discomfort or pain, take regular painkillers (paracetamol and/or ibuprofen) and let the clinical team know.
- Never try to block any of the drainage holes with any material.
- The adhesive dressing is very sticky and should not come off. If it does become unstuck, let the clinical team know. Do not place tape or plasters over the device as it could block the drainage holes.
- Occasionally, fluid can accumulate within the device. This might be slightly blood-stained. This is normal and can be removed using a syringe on the port at the bottom of the device. We will show you how to do this.
- If you experience significant worsening of your symptoms (such as breathlessness or pain), please contact the clinical team (see Contacts) in office hours or attend the Emergency Department.
Introduction
You have developed a pneumothorax (air in the cavity around the lung). This leaflet gives you information about the condition, and lets you know about a pathway to manage patients as outpatients (ambulatory) to avoid hospital admission.

What is a pneumothorax?
A pneumothorax occurs when air enters between the linings of the lung and the inside of the chest wall. This causes the lung to collapse away from the chest wall.

Collapsed lung

Why did I get a pneumothorax?
Your pneumothorax occurred following your lung biopsy. This happens in about 1 in every 3 patients.

What are the symptoms of pneumothorax?
Most patients experience a sharp chest pain (called pleuritic), which is worse when breathing. Some people are breathless. Patients may have minimal symptoms.
What treatment will I have?

Most people with a pneumothorax following a lung biopsy do not need treatment.

About 1 patient in 20 needs treatment of their pneumothorax following a lung biopsy. Your doctor will discuss the options for treatment with you and you have been treated with an all-in-one ambulatory device.

**Treatment using an all-in-one ambulatory device**

An all-in-one device (such as the Rocket Pleural Vent, shown in the picture below) may be inserted. This will involve numbing an area on the front of your chest (using a local anaesthetic injection). The small plastic tube (catheter) will then be inserted and the device secured to the front of your chest. This device has holes on the sides to let the air out but not back into the chest. If you are feeling well after insertion of this device, you may be able to be discharged home with this in place.
What will happen to me?

If we use an ambulatory device, you will be observed for 1 to 2 hours during which time we will repeat a chest X-ray to make sure that the lung has started to re-inflate. If so, and you are happy with the device, you will be discharged home.

You will be seen the next day by the doctors in the pleural team. After that, they will decide if the drain can be removed and when they need to see you again.

At each review, you will be seen by the medical team. They will check whether your lung has re-inflated (by looking at a repeat chest x-ray) and see if the air has stopped leaking from your lung.

When the lung stops leaking and is re-inflated, the device will be removed.

If the lung has not fully re-inflated or there is ongoing air leak, the device will remain in place, you will go home and we will review you again in a few days.

What can I do with the device in place?

With an ambulatory device in place, please observe the following advice:

• Wear loose fitting clothes over the top.
• Do not have a bath or immerse the device in water.
• You can remain active but should avoid heavy exertion or lifting.
• If you experience mild discomfort or pain, take regular painkillers (paracetamol and/or ibuprofen) and let the clinical team know.
• Never try to block any of the drainage holes with any material.
• The adhesive dressing is very sticky and should not come off. If it does become unstuck, let the clinical team know. Do not place
tape or plasters over the device as it could block the drainage holes.

- Occasionally, fluid can accumulate within the device. This might be slightly blood-stained. This is normal and can be removed using a syringe on the port at the bottom of the device. We will show you how to do this.

- If you experience significant worsening of your symptoms (such as breathlessness or pain), please contact the clinical team (see Contacts) in office hours or attend the Emergency Department.

**Will I need to have surgery?**

If your lung has not re-inflated or air is still leaking out after several reviews, you may need an operation to fix it. This is relatively uncommon.

During surgery under general anaesthetic, the thoracic surgical team perform a keyhole operation to find the air leak, re-inflate the lung and perform a procedure to stop the pneumothorax happening again (pleurodesis). Further information can be found in the Patient Information Leaflet called ‘Surgery for Pneumothorax’.

**What do I do after my pneumothorax?**

When you have completed your treatment, you need to be aware of the following advice:

- You should **not fly in an airplane for at least 7 days** after your pneumothorax has fully resolved.

- You should **avoid very heavy exertion/exercise** for the first few days.

- If you have any symptoms of worsening chest pain or breathlessness suggesting the pneumothorax may have come back, you should **return to the Emergency Department**.
Contacts

Your next appointment:

Dr ____________________________

will review you on ______ / ______ / ______ at ______________________ am/pm.

Please attend the department __________________________ at the __________________________ hospital for your daily review by the doctor.

If you have any question or concerns, please contact:
Non-urgent queries during office hours

Pleural Medical team
Tel: 01865 741 166 and ask for bleep 8112
Email: pleural.unit@nhs.net or ouh-tr.pneumothorax@nhs.net
(Monday to Friday)

Pleural Specialist Nurse
Tel: 07769 285354
(Monday to Thursday)

Ambulatory Assessment Unit
Tel: 01865 221 812
(Monday to Friday 0800-2100, Saturday/Sunday 0900-1900)

Outside these hours call the Hospital switchboard
Tel: 01865 741 166 and ask for the On-call Respiratory doctor.

In an emergency or with worsening symptoms, attend the Emergency Department.
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.