

Breathing difficulties due to chylothorax

Respiratory medicine

Information for Patients

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Introduction

This leaflet is for patients who have been diagnosed with chylothorax. The leaflet aims to explain what this condition means and to answer any questions you may have.

What is chylothorax

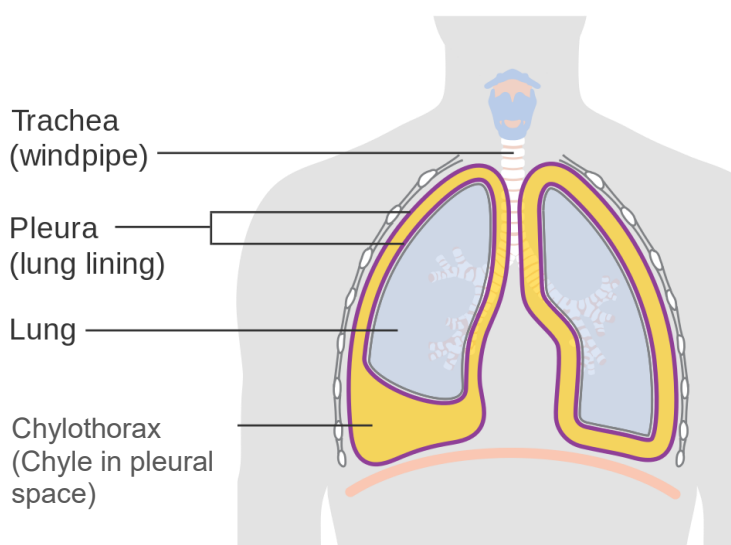
Chylothorax is a condition where there is a build-up of fatty fluid called chyle around the lung in the pleural space.

The pleural space is a space between the lungs and inner chest wall. This space is lined with a smooth lining called pleura.

Normally, there is a small amount of fluid in this space, to stop the lungs rubbing on the inside of the chest.

In chylothorax, chyle leaks from a main lymph vessel (called the thoracic duct) into the pleural space. The fluid stops your lung from expanding and causes you to have breathing problems.

Chyle is a fatty fluid in the lymph system. It is formed in the intestines when we absorb fat from our diet. It has important nutrients such as fat, protein, electrolytes, and white blood cells. When you keep losing these nutrients into the pleural space, you become at risk of malnutrition and a weakened immune system.



**Health information and support is available at www.nhs.uk
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To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

What causes chylothorax?

There are many causes of chylothorax:

- **Injury (trauma)**
This is the most common cause. Chylothorax can occur after injury to the thoracic duct (central lymphatic system). This can be due to surgery (such as cardiac, thoracic, oesophagus) or accidents (for example, knife wounds, motor vehicle accidents, or fall from height).
- **Cancerous tumour**
Lymphoma is the most common type of cancer to cause chylothorax. There are other cancers, such as metastatic cancer, lung cancer and chronic lymphocytic leukaemia.
- **Other causes**
There are other rarer causes such as: blood clot in central vein (SVC thrombosis), cirrhosis of the liver, heart failure, and tuberculosis (TB).

What are the symptoms?

At first you may not have any symptoms. As it progresses, it may stop your lungs from expanding fully and cause breathing problems. You may notice:

- Breathlessness
- Cough
- Chest discomfort

How is chylothorax diagnosed?

If your doctor thinks you might have chylothorax, they will arrange a chest X-ray to look for fluid in the pleural space and rule out other possible causes of your symptoms.

If there is fluid, either a sample will be taken or a chest drain inserted. If there is chyle in the fluid, it will look milky. The fluid sample will then be sent to the laboratory to analyse it and check the fat levels.

Depending on the cause of your chylothorax, other imaging scans may be needed to identify the location of the lymphatic system affected. This may include a CT scan.

How is chylothorax treated?

Treating the underlying cause

A major part of management is treating the problem that is causing your chylothorax. The treatment will vary depending on the cause. This should help your condition to improve and stop it from coming back.

Drainage

If there is a lot of chyle in the pleural space, or it is causing you breathing problems, it will need to be drained. This will involve inserting a chest tube between the ribs and into the pleural space, under local anaesthetic. For more information on chest drains, please read our Chest Drain Insertion information leaflet.

Diet

You will need to go on a special diet which is high in medium chain triglyceride (MCT) fat and low in long chain triglyceride (LCT) fat. This will be for at least 6 weeks.

This diet helps your condition by reducing the amount of chyle produced. This is because MCT is a type of fat that does not get absorbed into the lymph system.

The diet is very strict. Certain foods you are allowed to eat may need weighing when at home. Your dietitian will help you follow this specialist diet. They will also help you with any concerns you may have, offer recipes and prescribe food supplements as needed. MCT oil can be included when cooking meals and snacks at home. We will give you a supply of MCT oil and other nutrition products for home as needed.

Once your doctor has decided that you no longer need to be on this diet, you can return to eating your usual diet.

Once your symptoms have gone, you can safely return to work and go back to your normal physical activities.

What happens if my chylothorax does not get better?

If the chylothorax is difficult to control or comes back despite the above treatments, you may need

- medication to reduce the amount of chyle forming,
- to have some other procedures.

Your doctor will talk to you about this.

Treatment options that are considered include:

- Pleurodesis (using a drug to 'stick' the lung to the chest wall to stop more fluid build up)
- Surgery to the thoracic duct (a vessel containing lymph fluid to stop chylothorax build up)
- Percutaneous thoracic duct embolisation (a procedure to block the thoracic duct)
- Pleuroperitoneal shunt (a connection between the chest and tummy)

What happens when I go home?

You should continue to get follow-up appointments at the hospital until you have the 'all clear' from your doctor.

You will need regular follow-up clinic appointments to check that chyle is not building up again.

You will need regular monitoring to make sure the MCT diet is not causing any problems.



When to come back

If you have problems or concerns with your breathing, or notice an increasing shortness of breath, you should go to the Emergency Department or come back to us.

Who do I contact for more help or information?

If you have any more questions, or wish to discuss any aspect of your care, please do not hesitate to speak to your doctor or nurse.

You can find out more information about fluid build-up (pleural effusion) online by visiting the website patient.info.

Asthma and Lung UK also offers support and advice to anyone affected by a lung condition. They can be contacted through their website at www.asthmaandlung.org.uk/ or on their helpline on **0300 222 5800**

Tell us your views

We are keen to make your visit as straightforward and comfortable as possible. Please let us know if you have any comments or suggestions as to how we can improve your experience. You can also give us feedback online at: www.leicestershospitals.nhs.uk/contact/feedback/

Contact details

If you have other questions or need further information, please contact:

Pleural Diseases Specialist Nurses

Direct line: 0116 258 3975

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على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

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