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Having a diagnostic or therapeutic pleural aspiration to remove fluid from around your lung

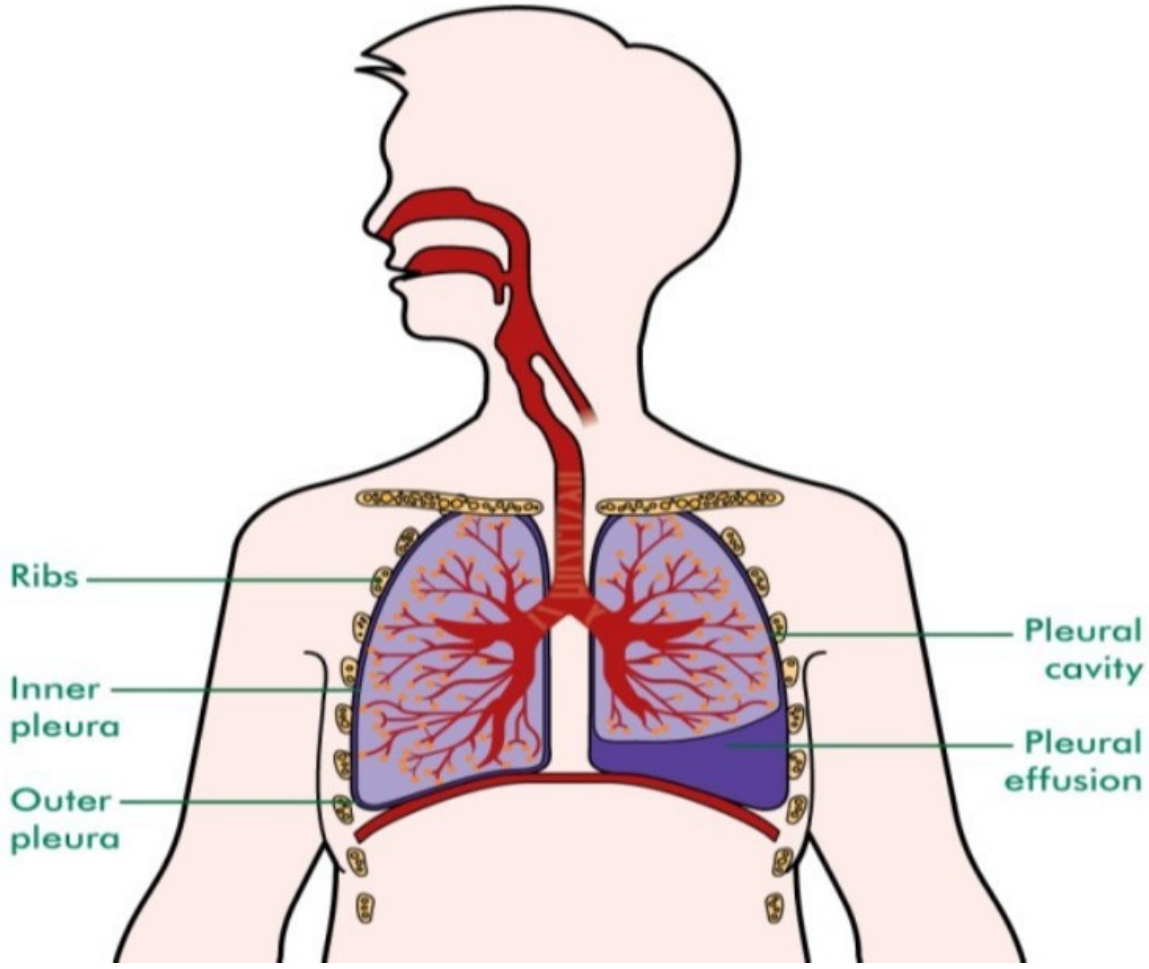
Respiratory Department

Information for Patients

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Introduction

This leaflet is for patients who are to have a diagnostic or therapeutic pleural aspiration.



What is a pleural aspiration?

A pleural aspiration (thoracentesis) is a procedure that removes fluid from the space between the lungs and the chest wall (the pleural space or cavity).

A diagnostic pleural aspiration takes a small volume (usually 20 to100ml) of fluid. We do this to do tests on the fluid. This helps us find out what could be causing it.

A therapeutic pleural aspiration removes a larger volume of fluid (up to 1.5 litres). This is to improve breathlessness and can also be used to do tests with.

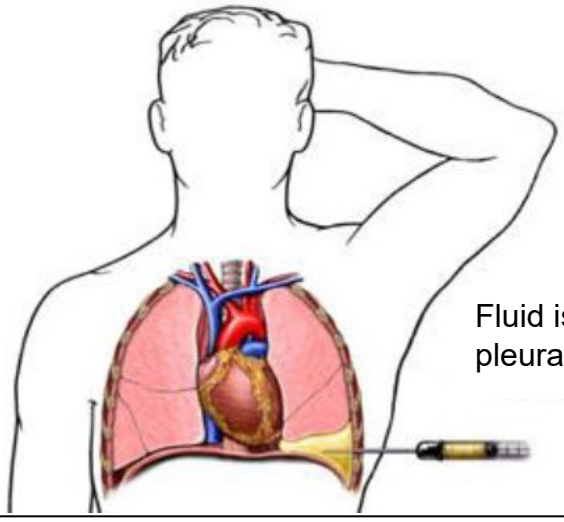


Image courtesy of BTS pleural diseases guidelines 2010

Why do I need a pleural aspiration?

Between the 2 layers of lung, there is a very small space (pleural space) which is usually almost dry. In your case fluid has collected in this space. If there is a lot of fluid then the lung cannot work properly. This makes you short of breath.

A diagnostic pleural aspiration helps us find out why this fluid is there and plan treatment. A therapeutic aspiration removes a larger amount of fluid to improve your breathing.

What could be causing fluid build-up?

There are a few possible reasons for this fluid to build-up:

- infection such as chest infection (pneumonia) or possibly tuberculosis (TB).
- cancer that has spread to the lining of the lung.
- swelling for irritation in the body (inflammatory processes) such as rheumatoid arthritis.
- problems in other organs, such as heart failure or kidney disease.
- build-up of fluid after heart surgery.

What are the risks of the procedure?

This is a very safe procedure with few risks. The doctor or a trained specialist nurse doing the procedure will talk about the risks with you and ask you to sign a consent form. The more common side effects are:

- pain: sometimes the injection of local anaesthetic can be sore. There can be a slight “catch” as the needle enters through the lining of the lung (this area can be difficult to numb).
- bleeding: there is a slight risk of bleeding caused by the needle used for the sample. The place that is chosen for the sampling aims to reduce the risk of bleeding.
- infection: the procedure is done in a sterile way to reduce any risk of infection in the fluid.
- collapse of lung: where air collects into the pleural space. This can get better by itself or may need treatment with a chest drain.
- organ puncture: this is when the needle used accidently catches the lung itself or another organ such as the liver or spleen. This risk is reduced by using an ultrasound at the time to find the best site for sampling. The risk of this is very low.

What happens during the procedure?

A specialist doctor or a trained specialist nurse will do the procedure. You will be able to ask any questions. You will need to sign a consent form if you are happy to go ahead.

1. You will sit on the end of the bed. Your head and arms will rest on a pillow on a table in front.
2. The best site for the procedure is found using an ultrasound scan machine. This scan is not invasive and will not hurt.
3. Your skin is cleaned with an alcohol cleaner to kill any germs.
4. A local anaesthetic is then injected to numb the area. This can sting for a short time but does not last long.
5. The doctor inserts a thin needle or narrow tube through the chest wall into the pleural space, and any fluid or air is removed.

How long will it take?

The procedure itself is fairly quick.

A diagnostic aspiration takes about 15 minutes. A therapeutic aspiration takes longer because more fluid is being removed.

The whole procedure takes about 45 minutes. This includes:

- the time taken to do the ultrasound scan,
- explain the procedure,
- complete the consent form,
- and take the fluid sample.

Aftercare advice

We will put a small dressing over the site after the procedure. You can take this off after 24 hours (1 day).

Your results

Your sample will often take 7 to 10 days to be processed. We will see you in clinic for the results.

If you have any issues you should:

- contact your GP explaining that you have had a pleural aspiration,
- or telephone your consultant's secretary (this number can be found at the top of your clinic letter).

If out of hours, or over a weekend, you can come to the Clinical Decision Unit, Ward 19, at Glenfield Hospital.

Contact details

Secretary to Consultant:	**0116 258 3112**
Pleural Specialist Nurse:	**0116 258 3975**
Pleural Service Co-ordinator:	**0116 250 2665**

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