

Oxford Centre for Respiratory Medicine

# A guide to fiberoptic bronchoscopy

Information for patients



## What is a bronchoscopy for?

Fibreoptic bronchoscopy is a routine procedure. It is a way of looking inside your lungs while you are asleep, using a thin flexible telescope called a bronchoscope. This procedure allows the doctor to learn more about your lungs and any illness that may be affecting them. The doctor can also take samples from your lung to help confirm a diagnosis.

## Is it only used to find out what is wrong with my lungs?

Usually bronchoscopy is performed to discover any illness or infection in the lungs. Occasionally, however, it can be a treatment. In patients who have inhaled a foreign body (such as a peanut or tooth filling) into their lungs, the bronchoscopy may allow the foreign body to be removed.

## Why are samples taken?

Samples are taken from the lungs via the bronchoscope in a number of ways and are used to aid diagnosis. Saline (salty water) can be flushed through the bronchoscope, and sucked out again, which removes a small amount of cells for examination. The doctor examines the cells to look for any signs of infection, inflammation or tumours.

A brush can be passed down the bronchoscope, and cells brushed from the lining of the air tubes in the lungs. These cells can then be looked at in the laboratory.

A pair of forceps (tweezers) on the end of a wire can be passed down into the lung through the bronchoscope. These can be used to take very small pieces of tissue for analysis in the laboratory.

A small needle can be passed down the bronchoscope to take a sample from any enlarged lymph glands. A sample of the cells from the glands can help to diagnose inflammatory diseases and tumours.

## What are the benefits?

Your chest doctor had recommended a bronchoscopy because they feel the benefits to you will outweigh the risks of the procedure. This decision is taken carefully and with your best interests in mind. It is up to you to decide whether you wish to have the procedure. We will ask for your written, informed consent before going ahead with the bronchoscopy.

## Are there any alternatives?

A bronchoscopy is necessary to confirm your diagnosis. There is no alternative way of doing this.

## What are the risks?

There are a number of possible risks and complications associated with fiberoptic bronchoscopy. They range from mild complications, which are common but not serious, to very serious complications that are extremely rare.

### **Mild complications**

- Many patients suffer from a fever and some sweating, between 6-12 hours after the bronchoscopy. This goes away by itself without any treatment and is not a sign of an infection.
- You will be sleepy after the procedure, and should not drive, work, operate machinery or sign any legal document for 24 hours after the procedure.
- A small number of patients are troubled by a sore throat after the procedure. If this does not settle within 48 hours you should contact your GP.
- Mild bleeding from the lung or airway occurs whenever a biopsy (sample) is taken, so that you can expect to have some blood staining of your phlegm after the procedure.

## **Moderate complications**

- Fiberoptic bronchoscopy can rarely cause a puncture to the lung wall. This can cause breathlessness and a sharp pain in the chest. It is extremely rare unless a procedure called transbronchial biopsy is performed, in which case it occurs in about 1 in 10 patients. If you need a transbronchial biopsy, the risks will be explained during the consent procedure. When a puncture does occur, 9 times out of 10 it heals by itself without further treatment. In the rare case when a puncture requires treatment, a small tube is passed between the ribs under local anaesthetic to remove the air leaking from the lung.
- Occasionally bleeding, amounting to a cupful of blood, can occur, but this is uncommon. Very rarely you may need a blood transfusion.

## **Serious complications**

- Death from bronchoscopy has been described as occurring in around 1 in 10,000 cases. Almost always, however, the patients who have died from bronchoscopy have been very ill in hospital beforehand, and have not been having the procedure as an outpatient.

## Will it be unpleasant?

The great majority of patients who have a bronchoscopy have either no memory of the procedure or no unpleasant memory. The sedative used during the procedure stops you from remembering anything about the procedure.

## How will I get home afterwards?

You will not be able to drive after the bronchoscopy for 24 hours. This is a legal requirement after sedation. It would also not be safe for you to ride home on a bus. It is therefore essential that someone is able to accompany you home, either driving you home or traveling with you in a taxi or hospital car.

If you need help to book transport, please contact Treatment Centre Reception on 01865 225734 the day before your procedure.

## What will happen on the day?

Please come to the reception desk on the Treatment Centre at the time you have been given. You should not have anything to eat for 4 hours before your appointment time and nothing to drink for up to 2 hours before.

Please bring with you any medication you take your spectacles if you wear them.

Please do not wear jewellery, nail varnish or make-up.

It would be helpful if you could let us know before you come for your procedure if you will need an interpreter.

When you arrive a member of staff will take your name and a few other details and let the bronchoscopy staff know that you have arrived.

A nurse will greet you and make you comfortable and take your blood pressure, temperature and pulse, and ask you questions about your medical history. The nurse or doctor will insert a small plastic tube into your hand or arm so that we can give you sedation and any other medication during the procedure.

Please let the nurse know if you are taking any medication which thins the blood, such as Heparin, Aspirin, or Warfarin. Please also tell us if you have any allergies or if you may be pregnant.

When your bronchoscopy is due to start, the nurse will show you to the bronchoscopy room where you will be asked to lie on a couch.

You will be given some sedation through the tube in your hand/arm. This drug will make you sleepy during the procedure, and will usually mean that you cannot remember anything about the procedure.

Your nose and throat will be numbed with local anaesthetic spray; this tastes rather bitter and will make it difficult for you to swallow. A small plastic tube will be placed next to your nostrils to give you some extra oxygen. A sensor is placed on one of your fingers to measure the oxygen levels in the blood throughout the procedure.

Some local anaesthetic will be injected directly into the windpipe. This does not hurt but may make you cough.

When you are sedated and the throat and windpipe are numb, the bronchoscope is usually passed down your nose (occasionally the mouth), past the back of your throat and into the windpipe.

The bronchoscopy usually lasts between 10 and 20 minutes. Afterwards you will be sleepy, and you will be taken back to your bed on the Treatment Centre while you wake up.

## What happens afterwards?

You will not be able to eat or drink anything for an hour because your throat will be numb and you will not be able to swallow safely.

When the nurse thinks that you are ready, they will offer you some water to sip; if this tolerated, you will be offered a drink and refreshments. The nurse will tell you when you can go home and will remove the plastic tube from your hand/arm. It is essential that someone accompanies you home.

## Getting the results

The results of your bronchoscopy will not be immediately available. 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 consultant or a member of their team.

You will be given on written instruction when you leave the Treatment Centre. Please follow these carefully.

## How to contact us

If you have any questions or concerns, please contact:

The Treatment Centre  
Tel: 01865 225736

## Further information

British Lung Foundation  
<http://www.lunguk.org/>  
Helpline: 08458 50 50 20

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473**. When we receive your call we may transfer you to an interpreter. This can take some time, so please be patient.

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