

## Having a bronchoscopy

#### Introduction

This leaflet gives you important information about having a bronchoscopy. It should also help to answer any questions you may have.

You have been advised to have a bronchoscopy to help us find out the cause of your symptoms. It is important that you read this leaflet so that you understand why you have been recommended for this test and what it involves.

When you come into the Endoscopy Department on the day of the bronchoscopy, the nursing staff will ask you some questions and make sure that you are prepared for your procedure. At this time, you will be given the opportunity to ask any questions that you may have.

Before the bronchoscopy, your consultant will give you further advice if you are pregnant, taking blood thinning medication (such as warfarin, aspirin, rivaroxaban or clopidogrel) or medication for diabetes.

#### What is a bronchoscopy?

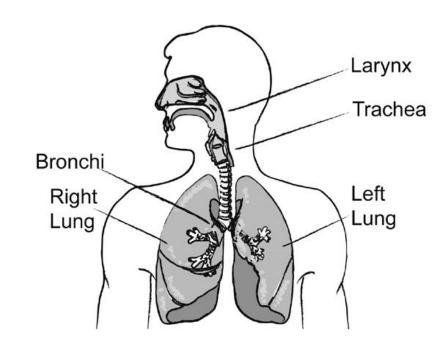


Figure 1: Respiratory system

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Department

Endoscopy

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A bronchoscopy is a procedure which allows a doctor to look inside your windpipe (trachea) and the large airways in the lungs (bronchi) using a thin, flexible telescope called a bronchoscope. It also allows the doctor to take samples from the airways and lungs to help get a diagnosis. The procedure is usually done while you are asleep, after you have been given a sedative injection but it can be done while you are awake if you prefer.

The bronchoscope is passed through your nose or mouth, past the voice box (larynx), and down your windpipe into the bronchi. The bronchoscope will give the doctor a clear view of different areas of the lung.

#### **Biopsy**

During the procedure, tissue samples may be taken to help us find out what the problem is.

- A small piece of tissue (a biopsy) may be taken for close examination in a laboratory. The biopsy is not painful. It is carried out using tiny forceps through the bronchoscope.
- A sample of cells from the lining of the airway may be taken using a tiny brush. This sample is called a bronchial brushing and can be useful in helping us find out if the diagnosis is lung cancer.
- A sample of the fluid in the lungs can be taken by squirting a small amount of saline fluid down the bronchoscope and collecting some of the aspirate in a container. This gives us a good sample to test for infection or abnormal cells in the lung and is called bronchial washing or lavage.

#### Preparing for the bronchoscopy

You will be asked to come to the Endoscopy Department on the day of the procedure. You must not eat anything for 4 hours before your appointment. You may sip clear fluids up until 2 hours before your appointment.

Please take your normal medication as advised in clinic. If you have diabetes (controlled with tablets or insulin or both), please follow the instructions given to you in clinic.



#### On admission to the Endoscopy Department

- You will be seen by a nurse who will check your personal details.
- You will be asked questions about any operations or illnesses that you may have had or are presently suffering with.
- Please bring a list of any medicines you are currently taking.
   If you use inhalers, please bring these with you.
- The nurse will want to know if you have any allergies or if you have had bad reactions to any medicines.

This procedure will be carried out with sedation and you will need a responsible adult to take you home when you are ready for discharge and to stay with you for 24 hours after your procedure. Without this discharge support, your bronchoscopy may have to be cancelled.

You will not normally have to get undressed for the bronchoscopy.

For the time that you are in the Endoscopy Department we want you to feel safe, supported and comfortable, so please do not be afraid to ask if you have any worries or questions at this stage.

Please remember that your appointment time is not the time you will have your bronchoscopy. There will be a waiting time between your admission and having your test done, as well as a recovery period afterwards. Expect to be at the hospital for 3 to 4 hours.

### Before the procedure

The procedure and any possible complications and risks will be explained to you so that you fully understand what to expect.

You will be asked to sign a Consent Form. When you have signed this form, it means that you have agreed to have the procedure done and that you understand why it is needed. This does not take away your right to ask for the procedure to be stopped at any time.



#### **During the procedure**

A nurse will take you into the room where your bronchoscopy will take place. A nurse will stay with you during the procedure.

The procedure will be carried out when you are either lying flat or in a sitting up position. Your pulse and blood oxygen levels will be monitored at all times during the procedure and your blood pressure will be checked as necessary. Oxygen will be given to you through a small sponge inserted inside a nostril.

As you will most likely have sedation for the bronchoscopy, you will have a needle (cannula) inserted into a vein in your hand or arm. This will allow the doctor to give you the sedative (medication to make you sleepy). You will start to feel sleepy very soon after having the sedative. Any loose dentures should be taken out at the start of the procedure and put back in at the end.

A local anaesthetic will be sprayed onto the back of your throat to numb it. Also, anaesthetic gel may be put into your nostrils.

Occasionally, an injection of local anaesthetic is made straight into the windpipe to numb it before the procedure.

When the area is numb, the bronchoscope will be inserted through your nostril and passed down the back of your throat and into the airways. This will not interfere with your breathing.

Any saliva in your mouth will be taken away, using a small suction tube, by the nurse caring for you.

A bronchoscopy normally takes about 20 to 30 minutes to complete.

### After the procedure

You will need to stay in hospital for 1 to 3 hours after the procedure; depending on the amount of sedation you have been given. This is called the recovery period. Your pulse and blood pressure will be carefully monitored while you are in recovery.

Your throat will stay numb for about 1 hour, during which time you cannot eat or drink. You will be offered a drink before you leave the department once the numbness has gone.



As stated earlier in this leaflet, you should have a responsible adult with you for 24 hours after the procedure.

If you have had sedation, it is possible that you will be unable to remember anything about the procedure. This is a known effect of the sedative.

### **Complications**

Complications do not happen very often and any risks will have been discussed with you during the consent process. Complications or side effects of bronchoscopy include:

- Cough and sore throat. Where the bronchoscope passes through the vocal cords it can irritate them leading to a cough and sore throat after the procedure. This is usually minor and will settle down without treatment within 1 to 2 days.
- Coughing up blood. When biopsies are taken, they can cause a small amount of bleeding. The doctor will make sure that this has stopped before the end of the procedure, but if you cough up some phlegm in the days after the procedure, it is likely that the phlegm will be streaked with a small amount of blood. This is normal and does not mean that you are bleeding internally.
- About 1 in 10 people get a fever about 8 to 12 hours after having a bronchoscopy, but infection after bronchoscopy is rare. If you feel hot and sweaty later on the day of your procedure, we advise you to rest and drink plenty of fluids. You can take paracetamol 500 mg tablets, 1 to 2 tablets every 6 hours as required.
- A puncture in the lung can happen in patients who have a certain kind of biopsy called a transbronchial lung biopsy. This sort of biopsy is used to take small samples of lung tissue for examination. If you are having a transbronchial biopsy it will be noted on your consent form.
   About 1 in every 20 patients who have a transbronchial biopsy develop a puncture in the lung. This can cause pain in the side of the chest and shortness of breath. Usually (in 2 out of every 3 affected patients) it does not need treatment, but occasionally, patients may be admitted into hospital to reinflate the lung. This is done using a small tube inserted in the chest.



- Some people get an irritation at the injection site.
- Although the dose of sedative used is small, some patients with lung disease can become over-sedated. This can result in slowing up of the breathing. If this happens, blood oxygen levels will be monitored and the sedation may have to be reversed and additional respiratory support might be needed.

All of these complications are quite rare.

### **Going home**

As you have had sedation (medicines to make you sleepy) it is very important that someone takes you home and that a responsible adult stays with you for 24 hours after the procedure.

**Please note:** You may go home by taxi but you must have someone with you during the journey.

The sedation takes 24 hours to completely wear off.

For this period of time, you should **not**:

- drive a car, motorbike or ride a bicycle.
- · drink alcohol.
- operate machinery or do anything requiring skill or judgment.
- make important decisions or sign any documents.

### Getting the results and follow-up appointment

In some cases, the doctor or nurse will be able to tell you your results before you leave the department. If tissue samples have been taken, to be looked at in the laboratory, it may be several days before the results are available.

Some people find that the sedation has an effect on their memory, but this is only temporary. It can be helpful to have someone with you when you are told your results.

If needed, a follow-up appointment will be arranged by your consultant. You will receive the appointment details by post.

Your GP will receive a copy of the report and the results of any biopsies when available.

An advice sheet which also includes this information will be given to you when you are discharged from hospital.



#### **Contact information**

If you have any questions, please contact the hospital switchboard.

Gloucestershire Hospital Switchboard

Tel: 0300 422 2222

When prompted ask for the secretary of your consultant.

Please contact your GP or consultant directly for your test results as these are not disclosed to Endoscopy.

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## Making a choice

## **Shared Decision Making**

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



## **Ask 3 Questions**

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

- 1. What are my options?
- 2. What are the pros and cons of each option for me?
- 3. How do I get support to help me make a decision that is right for me?

Ask 3 Questions is based on Shepherd HL, et al. Three questions and Counselling, 2011;84: 379,85.







AQUA https://aqua.nhs.uk/resources/shared-decision-making-case-studies/