

# Bronchoscopy

Respiratory Directorate Endoscopy Unit



# Introduction

Your doctor has advised that you have a test called a bronchoscopy to help find the cause of your symptoms and determine the best treatment. This leaflet has been prepared after talking to patients who have previously experienced the procedure. It may not answer all your questions and if you have any remaining concerns please do not hesitate to ask us on the day or contact us on the following telephone number(s):

This information leaflet should also provide you with all the background information you need when confirming that you wish to proceed with the test on the day that you attend.

# What is a bronchoscopy?

This is a test that enables the doctor to look directly at your voice box (larynx), windpipe (trachea) and into your lungs (bronchi). A bronchoscope is passed with lubrication through your nose, past your voice box down into the windpipe and into your lungs. Sometimes if the nostrils are too narrow we pass the bronchoscope through the mouth instead. It is a long flexible tube about the width of a thin pencil that shows a colour picture on a screen, so that the doctor can get a clear view of the different areas and check as to whether there are any abnormalities present.

During the test different procedures may be performed to obtain tiny amounts of tissue for further examination in the laboratory. This involves the painless removal of a tiny piece of the airway lining using tiny forceps which are threaded through the bronchoscope.

### Consent

We must seek your consent for any procedure or treatment beforehand. Your doctor will explain the risks, benefits, and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information. During your clinic appointment the proposed procedure will be explained to you. You will be given an information booklet and asked to sign the first part of the consent form to indicate that you agree to undergo the procedure. You will then take both these documents home with you. On the day of your appointment it is important you bring the consent form with you. The doctor carrying out the test will talk through the form with you again and confirm you are happy to go ahead with the test. This allows you some time following your clinic appointment to consider any questions or concerns you may before proceeding.

You will be asked to sign a consent form to give permission to have the test done. Part of the consent form will be completed in clinic.

Please read all the information on the consent form. It is hoped that having read this leaflet you will have been provided with enough information to give your consent.

After being assessed by the admitting nursing staff you will be asked by the Doctor carrying out the test to sign the consent form. If you have any queries you should ask the Doctor before signing.

#### Please bring the consent form with you to your appointment.

# What are the Benefits and Alternatives?

A bronchoscopy has been recommended either because you have some symptoms which indicate that you may have an abnormality of your airways or because an X-ray has revealed some abnormal shadowing.

It will be more difficult to decide what is causing these abnormalities without doing a bronchoscopy as we would only then have information from your X-rays. It is sometimes possible to consider passing a fine needle through the chest under local anaesthetic into a lung shadow to get more information, but your doctor will have discussed this with you if this is the preferred way forward.

# Complications / risks

If sedation is used for your procedure then there is a small risk that you will become too sleepy or that your oxygen levels may fall, if this occurs the sedation can be reversed using another medicine. In the days after the procedure you may have a cough or sore throat. During the procedure you may feel a little breathless, this is a normal feeling and should wear off quickly after the procedure.

#### **Fever / Infection**

About 1 in 10 people experience a temperature following bronchoscopy. In a similar number of people, traces of bacteria can be found In the bloodstream after the procedure, but this rarely leads to any problems.

#### Bleeding

There is only a 1 in 500 chance of significant bleeding during bronchoscopy. Bleeding is more likely if a biopsy has to be taken from the spongy area of the lung as opposed to the lining of the airways, but even then it occurs in less than 1 in 20 cases.

**Pneumothorax** (a leak of air between the lung and the chest wall) This rarely happens in a standard bronchoscopy procedure (about 1 in 1000 cases), but sometimes a sample of lung substance needs to be taken (see above) and then risk of a leak of air from the lung is about 3% and this is usually a small leak, which heals up by itself without any further action. If the leak were larger it might be necessary to suck the air out with a needle or place a thin tube under local anaesthetic through the chest to drain the air away. You may need to stay in hospital if this occurs.

#### **Risk of death**

Studies suggest that the death rate as a result of this procedure is around one chance in 5,000 cases, making it a very safe procedure.

### What should you expect?

#### The preparation

The test is done as a day case and although it usually takes place in the morning it may be in the afternoon. You will be asked not to eat or drink for at least 4 hours before the test. If you take anticoagulant tablets (such as Warfarin, Rivaroxaban, Dabigatran Apixaban or Edoxaban), or antiplatelet drugs (such as Clopidogrel, Prasugrel or Ticagrelor), or if you are a Diabetic, please telephone the **01922 656217** and speak to a nurse. We may need to alter your medication before the bronchoscopy.

If you have any personal access needs or require wheelchair access and wish to talk to a member of staff, please call **01922 656217**.

When you arrive, please tell the doctor or nurse if you have any allergies. They will also want to know about any previous bronchoscopy that you have had, whether you are asthmatic and any change in your condition since you were last seen in the clinic.

### During the test

In the examination room you will be made comfortable lying on a couch. You will be asked to remove glasses, (contact lenses can stay in) and to remove any false teeth (a denture pot is provided).

#### Sedation

A thin tube introduced with a needle will be placed into a vein in your arm or hand. Medication will be injected through this which will make you sleepy and relaxed, such that you may not remember much about the procedure afterwards. A small oxygen tube will be placed at the opening of one of your nostrils and some anaesthetic jelly will be placed in the other nostril to lubricate the nasal passage to reduce any discomfort during the insertion of the bronchoscope.

# The bronchoscopy

An oxygen measuring device will be placed on one of your fingers so that the doctor can manage your oxygen throughout the procedure. If your nasal passage is too narrow you will be asked to bite onto a mouth guard and the tube will be passed over the back of your tongue following some anaesthetic spray to numb the back of your throat.

Once you are sleepy and before the tube is passed any further, some local anaesthetic is sprayed onto your voice box and upper airways to numb these areas. This may cause some coughing which usually settles. Sometimes the anaesthetic is given through a fine needle directly through the skin in the front of your neck to anaesthetise the voice box and upper tubes. This is not painful but will also cause coughing. Further small amounts of local anaesthetic are sprayed where necessary in your airways to enable full examination.

The whole procedure takes about 15 to 20 minutes. It may be necessary during the procedure to take a photograph of part of your airways. Occasionally a fine brush may be passed out into the lung to obtain samples from an area of shadowing on the X-ray.

Water may be squirted through the bronchoscope out into the lung and sucked back to obtain samples from the lungs which can be analysed in the laboratory. Biopsy forceps are also used to obtain samples from the lung through the bronchoscope.

This may occasionally cause a few seconds of discomfort but the doctor will take appropriate measures to reduce the chance of this happening. On these occasions it may be necessary to use an X-ray machine to guide the passage of the bronchoscope to certain parts of your lung. When the examination is finished the bronchoscope is removed quickly and easily causing little discomfort.

# After the bronchoscopy

After the test you will be left to rest in the recovery ward where there will always be a nurse present to help you. Your oxygen will continue to be monitored and because your throat will be numbed, it is not safe for you to eat or drink at this stage in case this results in some of it going the wrong way down your windpipe (trachea). Coughing after the procedure is normal and may even produce some small amounts of blood. Your ability to swallow properly should return in 2 hours.

# Information for Women of Childbearing Age.

If you are pregnant or think that there is a possibility you could be pregnant, please contact the Endoscopy Unit on the telephone number at the front of this booklet.

We will need to discuss your individual circumstances as it may be necessary to cancel or delay your appointment.

### Going home

Providing everything runs smoothly you should be able to go home within a couple of hours of the test.

It is essential that a responsible adult should come and pick you up from the hospital and remain with you once you get home and overnight.

Once at home you should rest for the remainder of the day as you can still feel somewhat sleepy. The sedation lasts longer than you think so you should not drive a car, operate machinery, drink alcohol or sign anything important that needs a clear mind.

By the following day the effects of the sedation should have worn off and you should be able to resume normal activities.

# When do I know the results?

In many cases the doctor may be able to have a chat with you and, provided you have no objections, to the carers who are accompanying you home. It is helpful for such carers to be present, as it is likely that you will forget some of the things said by the doctor because of the effects of the sedation.

If samples have been taken for analysis it may be some several days before the results are known. Your doctor will be sent a copy of the report of the bronchoscopy and a follow up outpatients appointment will be organised to discuss the results of your investigation.

In some cases, the results from the bronchoscopy do not allow a diagnosis to be made, and you may need a further test, if this is the case, your doctor will explain why this is necessary

### **Contact details**

You can contact us with any further queries on telephone number **01922 656217** or use the telephone number noted at the beginning of this information leaflet.

Please confirm that you have understood the contents of this explanatory leaflet about bronchoscopy by signing and dating below. If you have any questions or concerns, please telephone us on the numbers provided or discuss these with the nurse or doctor prior to signing your consent form on the day of the test.

Please bring this leaflet with you when you attend.

Name:	
Signature:	Date:



Jeśli chcą Państwo otrzymać tę ulotkę w języku polskim prosimy skontaktować się z Działem ds. Relacji z Pacjentami.



ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਕਿਤਾਬਚਾ ਪੰਜਾਬੀ ਵਿੱਚ ਚਾਹੀਦਾ ਹੈ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਪੇਸ਼ੰਟ ਰਿਲੇਸ਼ਨਜ਼ ਟੀਮ (Patient Relations Team) ਨਾਲ ਸੰਪਰਕ ਕਰੋ।



যদি আপনি এই লিফলেটটি বাংলায় চান তবে অনুগ্রহ করে প্যাশেন্ট রিলেশন টিম–এর সাথে যোগাযোগ করুন।



Dacă doriți acest pliant în limba română, vă rugăm să vă adresați echipei de relații cu pacienții.



اگر آپ کو یہ کتابچہ اردو زبان میں مطلوب سے تو، براہ کرم پیشنٹ ریلیشنز ٹیم سے رابطہ کریں۔



If you require this leaflet in Braille, please contact the Patient Relations Team.

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