

Fibreoptic Bronchoscopy



Endoscopy Department
Shrewsbury and Telford Hospital NHS Trust

What is Fibreoptic Bronchoscopy

Fibreoptic bronchoscopy is used to help diagnose the cause for some conditions of the lungs. It is an examination that enables the doctor to look directly at your windpipe, voice box and into some areas of the lungs with a bronchoscope. A bronchoscope is a flexible tube, about the width of a pencil, with a bright light at the end. The tube is inserted through either the nose or mouth and passed slowly into your breathing passages. The tube does not stop your ability to breath or cough.

During the examination different procedures may be performed

- Biopsy: the doctor may take some biopsies (very small pinches of tissue) from the breathing tubes. This is not painful and is removed using tiny biopsy forceps through the bronchoscope.
 - Brushing: the doctor may scrape a brush along the wall of your airways in order to brush some cells off of it
 - Washing/aspiration: to remove secretions from the lungs, sterile fluid may be inserted through the bronchoscope into your lungs and then removed again via the bronchoscope.
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Your Appointment

It is everyone's aim for you to be seen as soon as possible. However, the department is very busy and your investigation may be delayed. If emergencies occur, these patient will be given priority.

Property

Please do not bring valuables to the hospital. We cannot accept any responsibility for the loss or damage to personal property during your time spent on the unit.

Risks, Benefits and Alternatives

Risks

As with every medical procedure, the risk must be compared to the benefit of having the procedure done.

Common (more than 1 in 100 cases):-

- Sore throat- This usually settles within 24 hours
- Minor bleeding- It is not unusual to cough up small amounts of blood. This usually settles within 24 hours

Rare: (less than 1 in 100 cases):-

- Throat or chest infection- If you start to cough up yellow/green phlegm, or feel more chesty, then this may be a chest infection. Your GP will be able to advise you about the need for antibiotics.
- Major bleeding- This is rare (1 in 100) and may require admission into hospital for observation. In more severe cases, transfer to another hospital may be required for further procedures to stop the bleeding.
- Pneumothorax- This occurs when an air leak forms between the airways/lung and the chest wall, causing the lung to collapse. It often requires a chest tube to be inserted, in which case admission to hospital for a few days is usually necessary
- Myocardial infarction ("heart attack")

- Cardiac dysrhythmia- Rarely the heart may beat in an abnormal rhythm as a consequence of the procedure, which usually requires treatment as an inpatient.
- Over sedation- If sedation is used, then there is a risk of over-sedation. This results in the abortion of the procedure, and often the administration of drugs to reverse the effects of sedation. In mild cases, you may need to stay in hospital for a few hours, but in more severe cases you will need to be admitted to hospital overnight, and may require care on the high dependency unit (HDU) or intensive care unit (ICU).
- Death- This is very rare (1 in 5000 cases) and usually occurs in patients with significant underlying medical conditions.

Benefits

The purpose of the examination is to find the cause for your symptoms or condition, although some conditions can be treated during the examination.

Dependent on the results of this test, which could be normal or abnormal, further tests or treatment may be recommended.

Alternatives

In some cases, a rigid bronchoscopy can be an alternative to flexible bronchoscopy. A straight hollow metal tube is inserted into the windpipe via the mouth and voice box under general anaesthetic in an operating theatre. However, this does not allow us to see your airways with the same level of detail, and increases the risks/complications of the procedure due to the general anaesthetic used.

Preparation For The Procedure

What preparation is required?

Diabetic

If you are on tablets for diabetes, do not take them on the day of the test. If you are taking insulin, then your doctor should advise you beforehand, but usually any short-acting insulin is omitted in the 6 hours before the test, while long-acting insulin doses are reduced by 2/3 on the day.

Medications to thin your blood

There is no need to stop aspirin before your test. However, all other medications used to thin the blood (such as warfarin and clopidogrel) are usually not taken for 7 days before the test (less for some of the newer blood thinning medication). Usually this is safe to do, but in some conditions it is important to use alternative medication to thin your blood during these 7 days. The doctor who requested your EBUS should be able to advise you further on this. If you have any doubts, then it is important that you contact the endoscopy department.

Current medication

Please bring a list of any current medication and any inhalers or angina sprays that you use.

Nil by mouth

It is important that you do not have anything to eat 4 hours prior to your appointment time. You may have sips of water for up to 2 hours prior to your procedure.

Photographs

We do sometimes take photographs during the procedure and these will be kept in your medical records.

Training

The training of doctors and other health care professionals is essential to the continuation of the NHS and to improving quality of care. Shrewsbury and Telford's Hospital's Endoscopy Units are both training units. All trainees are experienced doctors, and the procedure is performed under the direct supervision of an expert consultant. The trainer is there to ensure your safety and comfort. You can however decline to be involved in the formal training of medical trainees and students- please inform the nursing staff on admission- this will not affect your care or treatment.

Responsible adult

It is important that you have a responsible adult accompany you home and stay with you for 24 hours after the procedure. You will not be able to drive for 24 hours after the procedure.

Pregnancy

Please inform the unit prior to your appointment if you are pregnant.

What Happens When You Arrive at Hospital

On admission

After admission by reception staff, a member of the nursing team will prepare you for your examination. She will ask you some questions, including your medical history.

The nurse is very aware that you may be worried and anxious, so do not be afraid to ask any questions

Consent

The nurse will explain the procedure to you and discuss any potential risks. You will have the opportunity to ask any further questions. If you have not already done so prior to your appointment, you will be asked to sign the consent form confirming that you understand the procedure and agree to go ahead with the examination.

The Investigation

What should I expect?

1. Prior to going to the examination room, you will be asked to sniff some local anaesthetic gel.
2. In the examination room, you will be asked to lie on a couch.
3. In order to monitor your heart rate and breathing, the nurse looking after you will clip a probe onto one of your fingers.
4. If you are feeling anxious, then you may be given sedation. In this instance, a small needle will be inserted into the back of your hand, through which the sedation will be given.
5. The bronchoscope is then passed gently into your nose and down the back of your throat. In the uncommon situation that the doctor is unable to pass the scope through the nose, the doctor will spray the back of your throat with an anaesthetic spray, ask you to bite on a mouth guard, and insert the bronchoscope through your mouth instead and down the back of your throat.
6. Anaesthetic will be sprayed through the scope onto your voice box. This will make you cough, but the cough will resolve as this area becomes numbed.

7. The scope is then inserted through the voice box into your windpipe. Further anaesthetic is sprayed into your lungs, and this will make you cough for a small time again.
8. A soft plastic tube may be put inside your other nostril to give you some oxygen.
9. The doctor will then look around your breathing tubes with the bronchoscopy, and take samples if appropriate.
10. The bronchoscope is removed quickly and easily, causing no discomfort, once the relevant samples have been taken.

A nurse will be with you throughout your examination, helping you to remain relaxed. The procedure usually takes about 15-30 minutes, and you will be ready to leave the unit approximately 1-2 hours later.

What Happens Afterwards

After the examination

Once completed, the nurse caring for you during your examination will take you to the recovery area, where you will be monitored until your discharge home. You will be allowed to rest for as long as necessary

Discharge Arrangements

The nursing staff looking after you will speak to you prior to discharge, however the biopsy sample results will take at least several days, so you may be given an outpatient appointment to return for review.

If you have sedation, it may be a good idea to have someone with you at this discussion as sedation can affect your ability to retain information. Sedation may affect your judgment and reflexes for 24 hours. It is therefore important that if you have sedation that you have a responsible adult to take you home following the procedure, and to remain with you for the next 12 hours. You must not drive a vehicle, drink alcohol, operate heavy machinery or sign any important legal documents for 24 hours following sedation.

If you have any of the following, you should contact your GP or the Accident and Emergency department:-

- Pain when breathing, either in your chest or in your shoulder
- Difficulty breathing or in expanding your lungs
- Persistent or increased bleeding

The numbing effect of the throat spray may last for 2 hours. After this period of time and when the numbness has worn off, you will be able to eat and drink normally.

Contact Details For More Information

Appointment queries

If you are worried or have any questions, please do not hesitate to contact the endoscopy department

- Princess Royal Hospital, Tel: 01952 641222 Ext: 3103/3104
- Royal Shrewsbury Hospital, Tel: 01743 261064

As a patient, relative or carer

Sometimes you may need to turn to someone for on-the-spot help, advice and support. Please telephone:-

- Princess Royal Hospital, Tel: 01952 641222 Ext: 4382
- Royal Shrewsbury Hospital, Tel: 01743 261064

Further information is available from:-

- **Patient Advise and Liaison Service (PALS)**
PALS will act on your behalf when handling patient and family concerns. They can also help you get support from other local or national agencies. PALS is a confidential service.
- Royal Shrewsbury Hospital, Tel: 0800 783 0057
- Princess Royal Hospital, Tel: 01952 282888

Useful websites

- **Patient UK**
Provides leaflets on health and disease translated into 11 other languages as well as links to national support/self help groups and a directory of UK health websites

Website: www.patient.co.uk

Disclaimer

This leaflet is provided for your information only. It must not be used as a substitute for professional medical care by a qualified doctor or other health care professional. Always check with your doctor if you have any concerns about your condition or treatment. This leaflet aims to direct you to quality websites- these are correct and active at the time of production. The Shrewsbury and Telford Hospital NHS Trust is not responsible or liable, directly or indirectly, for ANY form of damages whatsoever resulting from the use (or misuse) of information contained in this leaflet or found on web pages linked to by this leaflet.

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