

Having a Bronchoscopy

Department of Respiratory Medicine

Patient information

This leaflet will help you and your family to understand more about bronchoscopy. Please read it and ask any questions you may have. The specialist will ask you to confirm that you have read it and explain the procedure to you personally, before asking you to sign a consent form. This will either be done in the clinic or in the endoscopy department immediately before the test. The leaflet is divided into sections:

- What is a bronchoscopy?
- Why do I need a bronchoscopy?
- Is there an anaesthetic?
- How is it carried out?
- Are there any risks?
- What happens afterwards?
- When will I know the results?
- What should I do on the day of the bronchoscopy?
- Who can I contact if I have a question?

And finally, the date and time of your test, together with directions on where to go, will be written for you on the leaflet.

What is a bronchoscopy?

Bronchoscopy is a test which allows inspection of the windpipe and smaller air passages of the lungs using a flexible camera about the size of a pencil.

Samples of fluid or tissue can be taken from inside the lungs and sent to the laboratory to check for any abnormalities.

Why do I need a bronchoscopy?

A bronchoscopy is usually suggested if a chest x-ray has shown some shadowing in the lung which is not clearing up, and which might indicate an underlying problem such as a cancer or an unusual infection. It is also helpful to look for the cause of any blood you may have coughed up. It can be used to retrieve a foreign body e.g. a peanut which has been inhaled. It is sometimes helpful in patients who have a chronic cough which has not been explained by simpler tests.

Is there an anaesthetic?

You do not need a general anaesthetic. A sedative injection may be given before the procedure starts. A local anaesthetic spray or gel is put into your nose where the flexible bronchoscope is to be inserted. More local anaesthetic is sprayed into your throat and more is given directly into the bronchial tubes through the bronchoscope as the examination progresses. No pain is felt from the inside of the lungs even if tissue samples are taken and the local anaesthetic is to help reduce any coughing.

How is it carried out?

You will be asked to lie on a couch, usually semi-upright, and the bronchoscopist (who is one of the doctors) will standeither in front of you to one side of the couch, or behind yourhead. After any sedative injection and the local anaesthetichave taken effect, the bronchoscope will be passed gently into one side of your nose (occasionally your mouth), and back into your throat. The throat will be examined, more local anaesthetic applied and, after a pause to allow this to work, thebronchoscope will be passed down the windpipe and into the bronchial tubes. You will feel some discomfort as thebronchoscope is passed through your throat, which will pass, and after that the only uncomfortable feeling may be coughing. The bronchoscope is small in relation to the windpipe and bronchial tubes and there is plenty of room to breathe, but

you will not be able to talk. The images from the bronchoscope are transmitted to a TV screen which the bronchoscopist watches.

Samples are taken by squirting saline solution through the bronchoscope into the bronchial tube being examined and sucking back the liquid. The fluid is collected in special bottles. The saline now contains secretions from the lung which are analysed in the laboratory for signs of infection or cancer. Tissue samples, 'biopsies', are taken with tiny forceps passed through the scope and are sent to the lab for examination under the microscope.

In some conditions, it is necessary to take samples using an x-ray machine to guide the biopsies (trans-bronchial biopsies). If this is needed, the doctor will explain the process specifically beforehand.

The procedure takes about 20 minutes.

Are there any risks?

Flexible bronchoscopy is very safe, but there are sometimes side effects and, rarely, complications which you need to be aware of in order to decide whether or not to agree to have this procedure.

Side effects

During the examination, coughing is common, though local anaesthetic is used to reduce this as much as possible. After the test, it is likely that you will have a sore throat for a day or two or some soreness of the nose. You might also have a hoarse voice for a short time.

It is quite common to cough up small amounts of blood for a few hours after bronchoscopy especially if biopsies have been taken. Nose bleeds can occur but are quite rare. You should tell the doctor if you get troublesome nose bleeds and if they affect one side of your nose in particular so that the bronchoscope can be inserted through the other nostril.

Complications

Major complications are uncommon, affecting 1–5 patients per 1000 bronchoscopies. These include significant bleeding or collapse of the lung following a biopsy, infection in the lung or an allergic reaction to local anaesthetic or sedative. An irregular or rapid heart rhythm may occur in patients with underlying heart disease. Breathing difficulties can occur during bronchoscopy in patients who have bad asthma or COPD (chronic obstructive pulmonary disease, such as emphysema) and the effect of sedation may reduce breathing further and cause low oxygen levels in the blood. Very rarely this is severe enough to require an anaesthetist to insert a breathing tube through the mouth into the windpipe and transfer to an intensive care unit. Even more rarely, cardiac arrest and death can occur. Such devastating complications are extremely uncommon, reportedly once per 10,000 bronchoscopies, but the risk is greater if there is already serious lung or heart disease present and is taken into account in weighing up the pros and cons of having the test when discussing it with you.

Your safety

To reduce the risk of complications, your lung function (breathing capacity) and oxygen levels will be checked in the clinic. Blood tests will be done to check blood clotting to reduce the risk of unexpected haemorrhage. It is important that you have told the healthcare team of any breathing or heart problem you have, of any allergies that you know of, and what medicines you are taking.

During the procedure your oxygen level will be continuously checked via a clip-probe on your finger, and you may be given extra oxygen through a mask or nasal tube. Your heart will be monitored and your blood pressure taken at regular intervals.

What happens afterwards?

After the bronchoscopy you will be taken back to the recovery area a few yards away from the bronchoscopy room. For 2 hours the nurses will check your pulse, blood pressure and breathing at intervals. During this time you will not be able to eat or drink due to the numbness in your throat.

We do not routinely discuss the results of the examination with you before you go home. This is because any sedative injection often makes it hard to remember things for a few hours, but also because often we won't yet know the answers until the lab results are back. If there is important information to tell you, and you are with someone, then we are happy to tell you what we have found.

You will normally be allowed home after 2 hours. You must not drive yourself, and should not drive or operate machinery for 24 hours.

You should have someone at home with you until the following day, and should take it easy for 24 hours. You should not drink alcohol and you should not sign any important documents during this time. All of this is to make sure that the effects of the sedation have completely worn off.

When will I know the results?

You will be given an outpatient appointment a week or two after the bronchoscopy to discuss the results. It is possible that other x-rays or scans may be needed first and the doctor will explain if this is necessary.

What should I do on the day of the bronchoscopy?

Eating and drinking – You should not eat anything at all for at least 6 hours before the test. You can drink water only (no tea, coffee, or other liquids) for up to 2 hours before. For the final 2 hours before the test you should not eat or drink anything at all.

Medication – You should take your usual medications on the morning of the test, with any necessary sips of water, except:

- if you are taking tablets for diabetes, do not take them on the day of the test. If you are taking insulin, the doctor will advise you beforehand, but usually any short-acting insulin is omitted in the 6 hours before the test, while long-acting basal insulin doses are reduced by 2/3 on the day.
- Blood thinners: Please let us know if you are taking any of the medications below because your individual health needs may vary but below is a summary of usual practice:

WARFARIN: usually stopped 5 full days before the procedure. You will need an INR blood test 1-2 days before the procedure to ensure you INR is below 1.5. In some situations, we may give you an alternative shorter acting agent to take instead, in the lead-up to your procedure.

Aspirin: Do not take on the morning of the procedure.

Clopidogrel: Usually stopped 7 full days before the procedure.

Dipyridamole: Usually stopped 7 full days before the procedure.

Ticagrelor: Usually stopped 7 full days before the procedure.

Rivaroxaban: Usually stopped 2 full days before the procedure.

Apixaban: Usually stopped 2 full days before the procedure.

Dabigatran: Usually stopped 2 full days before the procedure.

Dalteparin: (injections) Usually stopped 1 full day before the procedure.

Enoxaparin: (injections) Usually stopped 1 full day before the procedure.

Travel – Please arrange for someone to bring you and take you home. The hospital can only provide transport if it is impossible for you to make any suitable arrangements.

Reporting for the bronchoscopy – report at the time you have been given in the clinic, written below.

- At the Royal Sussex County Hospital (RSCH), bronchoscopies are done in the Endoscopy Unit which is on Level 9A of the Millenium Wing.
- At the Princess Royal Hospital (PRH), bronchoscopies are done on Cuckfield ward on the first floor.

The nurses will show you to a bed and check your details. You will be asked to change into a hospital gown, and your pulse, blood pressure and oxygen levels will be recorded. A small plastic cannula will be placed in one of your arm veins, to be used for any sedative injection later. The doctor who is going to carry out the bronchoscopy will talk to you about the test, make sure you understand what will happen and that you have read this leaflet, and then ask you to sign a consent form.

Who can I contact if I have a question?

If you have a question about the bronchoscopy, contact one of the respiratory administrators. 01273 696955 Ext.67825

In the very unlikely event that you have a problem after going home from the test you will need to contact the respiratory administrators (details above) if within normal working hours, or the medical registrar on call if out-of-hours, either at:

RSCH (01273 696955) or PRH (01444 441881)

Further information and support:

The British Lung Foundation, www.blf.org.uk

Helpline 03000 030 555

My bronchoscopy

Date:	
Time:	
Place:	

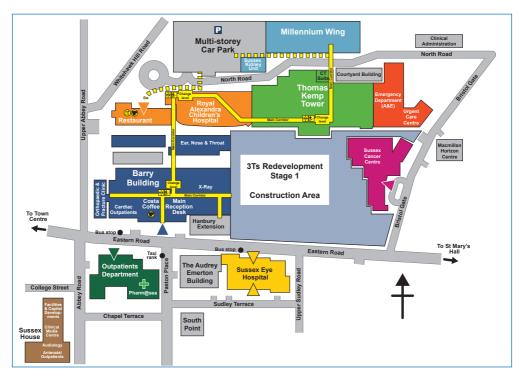
Notes and questions

Where is the bronchoscopy performed?

At the Royal Sussex County Hospital, the bronchoscopy takes place on:

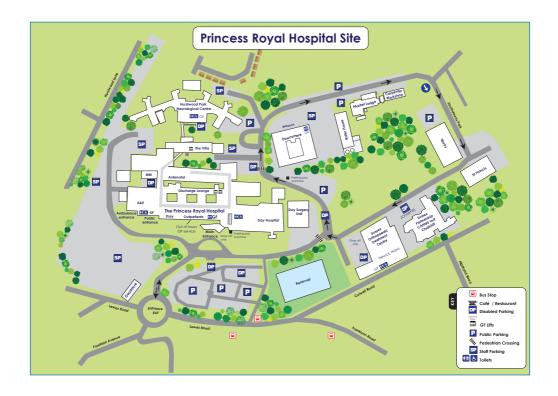
Endoscopy Unit Level 9, Millennium Building Royal Sussex County Hospital Eastern Road, Brighton BN2 5BE

The Millennium Wing can be seen on the site map below.



At the Princess Royal Hospital, the bronchoscopy takes place on:

Cuckfield Ward First floor, Princess Royal Hospital Lewes Road, Haywards Heath RH16 4EX



Patient agreement to investigatio Patient details (or preprinted label) Surname	Male □ Female □
First names Date of birth NHS number	Responsible health professional
Name of proposed procedure or cour Emergency □ Flexible Bronchoscopy □ (Examination of the insides of the airway with biopsies, brushings and washings as	Elective Endobronchial Ultrasound s, trachea and bronchi in the lungs,
Statement of health professional (to be filled edge of proposed procedure, as specified in consent policy	ed in by health professional with appropriate knowl- v)
I have explained the procedure to the parties intended benefits To assist in the diagnosis and possible treaffecting the lungs or airways. Common risks – Sore nose and throat, comore serious but rare risks – infection, by pression.	atment of various conditions
I have also discussed what the procedure risks of any available alternative treatme particular concerns of this patient. The booklet 'Having a Bronchoscopy / EB This procedure will involve: Local and	nts (including no treatment) and any US' has been provided □ aesthesia □ Sedation □
Signed	
Name (PRINT)	Contact
Statement of interpreter (where appropriate I have interpreted the information above to t and in a way in which I believe they can under Signed	the patient to the best of my ability
Name (PRINT)	Date
1101110 (111111)	

Statement of patient

Please read this form carefully. If your treatment has been planned in advance, you should already have your own copy of the booklet 'Having a Bronchoscopy' which describes the benefits and risks of the proposed treatment. If not, you will be offered a copy now. If you have any further questions, do ask – we are here to help you. You have the right to change your mind at any time, including after you have signed this form.

I agree to the procedure described on this form.

I understand that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.

I understand that any procedure in addition to those described on this form will only be carried out if it is necessary to save my life or to prevent serious harm to my health.

I understand that any tissue/body parts removed during the procedure will be used for diagnosis and then disposed of appropriately and/or used for education/research purposes.

I understand that data regarding my treatment may be provided to the Department of Health for Audit purposes, and if necessary that appropriately appointed personnel

See also advance decision (e.g. Jehovah's Witness form)
Patient has withdrawn consent (ask patient to sign/date here)

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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