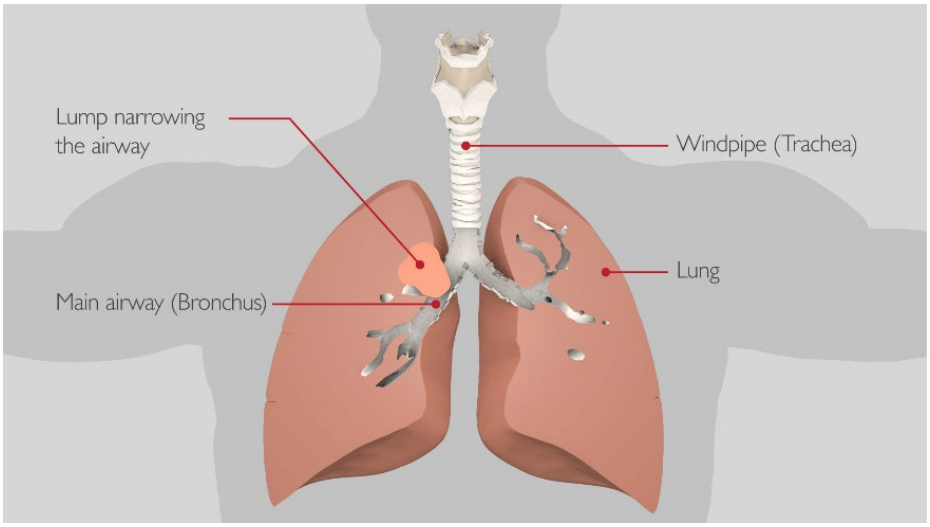
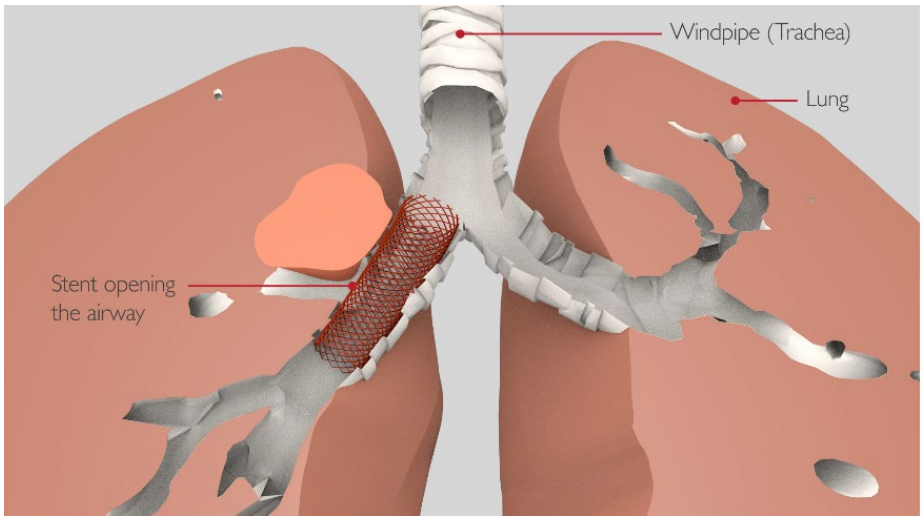
Bronchoscopy

Welcome to the Thoracic Surgery Department, Queen Elizabeth Hospital in Birmingham. The Thoracic team is a surgical team dealing with problems involving the chest, for example,. the lungs, airways, or heart

We hope that this information leaflet can answer some questions you have about your procedure. The information provided in this leaflet will be discussed with you in full before your admission.





What is a bronchoscopy?

Bronchoscopy is a camera procedure of looking into the windpipe (trachea) and smaller airways (bronchus). Thoracic surgeons perform bronchoscopy with a straight tube; this is done when you are fully asleep under a general anaesthetic. There are two types of bronchoscopy; rigid and flexible.

Rigid: this is a metal tube which is passed into your airway to have a general look. This also allows access for other procedures, which are discussed in the next section.

Flexible: Similar to a rigid bronchoscopy, this is a flexible tube which is commonly used. It allows us to look further into your airways, and guide further procedures.

The procedure usually takes around 15-20 minutes, but may take longer if you need an extra procedure.

What is bronchoscopy used for?

There are many reasons why we might do a bronchoscopy, these include the following reasons:

- Routine at the start of any thoracic surgery operation to look at the airways to check for any problems and clear mucus
- Biopsies can be taken to get a diagnosis of your condition
- Foreign objects can be removed
- Extra procedures can be done to unblock or widen the airway. These include dilating (widening) the airway, removing abnormal tissue, or placing a stent (please see below)

Sometimes people are very unwell from the airway being very narrow or from bleeding in the airway. Lung tumours can block the airway and cause severe shortness of breath. We may be able to perform a bronchoscopy urgently to help.

Extra procedures during bronchoscopy

Biopsy

Small samples of tissue can be taken from inside the airway. This is usually done to confirm the diagnosis of what is causing a lump in the airway.

Dilatation

Dilatation is widening of the airway. A small balloon device is passed into the airway and inflated, this pushes the airway open. Narrowing can come back after dilatation; the procedure can be repeated at a later date.

Removing tissue and laser

Tissue can be removed to clear a blockage. This may be used on its own or in combination with a laser. A laser beam can be used to burn away tissue that is blocking the airway. There is a small amount of bleeding with either of these procedures. Bleeding can normally be stopped during the bronchoscopy. Heavy bleeding is very rare. If there is a lot of bleeding, you may need a blood transfusion or another procedure. Damage to a major blood vessel can be very serious, and even potentially life threatening.

Stents

Stents are tubes that can be placed inside the airway after dilatation. They help keep the airway open and make breathing much easier. They are most commonly used to help manage symptoms of lung cancer. Stents may become displaced or make it difficult to clear mucus from the lungs. Extra tissue may form as a result of a reaction to the stent, which can narrow the airway again. Very rarely a stent may wear away a section of the airway and damage a blood vessel or the gullet (oesophagus).

Risks of bronchoscopy?

The risks outlined here are a guide; your own individual risk may vary. You should discuss the risks and benefits of surgery with your surgeon, especially if you are worried. Complications after bronchoscopy are uncommon.

If you have severe symptoms and one of the large airways is partly blocked the surgery carries more risk. You should discuss this with your surgeon.

Minor and Common risks

Sore throat
It is normal to have a sore throat following a bronchoscopy. This should settle in a few days.

Cough
You may cough up a small amount of blood for a few days, this is normal. You may need to stay in hospital or have another operation if there is a lot of bleeding.

Injury
Damage to the teeth, lips or gums is possible from the anaesthetic and bronchoscopy instruments. The surgeon and anaesthetist will try very hard to prevent this. Please do inform the surgeon and anaesthetist if you have any loose teeth, caps, crowns or bridges.

Hoarse voice
This can occur as a result of damage/stretching of the vocal cords – this is usually due to bruising and should settle in a few days.

Shortness of breath
If you had difficulty breathing before the bronchoscopy your oxygen levels may be lower for a few hours or days. You will be monitored until this improves and given medication if necessary.

Serious and uncommon risks

It is possible to make a small hole in the airway. Rarely bronchoscopy may cause a pneumothorax, commonly referred to as a collapsed lung, this would make you feel short of breath. You may need to have a chest drain and stay in hospital until it settles.

Risk to life:
Some conditions present in a very serious manner, in these cases, there is a bigger risk to life. In most patients who present with little/moderate breathing difficulty, the risk of death is far less.

Are there alternatives to a bronchoscopy?

Bronchoscopy can be performed to get a diagnosis, or to offer some treatment for a condition. Alternatives treatments will depend upon your diagnosis. Your own diagnosis will also give you an idea of what to expect from the disease, including symptoms, risks to you or your life.
If you do not want to have a bronchoscopy to get a diagnosis for your condition, other options may include:

- Relying on existing tests (e.g. scans) to judge which disease is most likely
- Medical bronchoscopy, which is usually done by the medical team, and is done under sedation, where you are not fully asleep. During this procedure, it is possible to get a biopsy, known as an EBUS.
- Continuing close observation

Information for Patients

You can discuss treatment options with your hospital doctors or your GP.
It is your choice whether to go ahead with surgery or choose another kind of treatment. We will respect your wishes and support you in choosing the treatment that suits you. You are always welcome to seek a second opinion.

What can I expect during my admission and during my recovery?

There are two routes in which you might present to hospital. One is an elective pathway where you have come in from home and given a date for your procedure, the second is as an emergency, where you have been transferred from another hospital or brought in from home for an urgent procedure.

In most cases, bronchoscopy is a day case procedure. If you have an extra procedure you may need to stay in hospital overnight for monitoring. If you have a bronchoscopy as an emergency, you will need to stay in hospital afterwards for monitoring and recovery.

Elective

Bronchoscopy is usually a day case procedure. Most people are admitted on the day of the procedure and usually can go home again later the same day without having any problems. After a general anaesthetic you can feel quite tired. You should not work or drive for 48 hours afterwards. It is normal to have a sore throat after a bronchoscopy, this should settle over a few days. You can use painkillers (e.g.paracetamol) as usual at home if required.

Emergency

In some cases, you may have been transferred from another hospital or have come in from home as an emergency. In this case, we aim to do your procedure as soon as possible. This may not be on the same day as your admission, but as soon as we can safely perform the procedure.
You will usually be kept in overnight after the procedure, and possibly a bit longer, depending on how well you are after and how you are recovering.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email interpreting.service@uhb.nhs.uk.