Having a Bronchoscopy
A Guide for Patients

Please bring this booklet with you on the day
You have been advised by your hospital doctor to have a bronchoscopy. Please read this leaflet carefully and note the important points highlighted. Please remember to bring this booklet with you on the day as it contains the consent form.

What is bronchoscopy?

Bronchoscopy is a procedure that allows the doctor to look into the airways of your lungs. A flexible tube (bronchoscope) is passed into your windpipe (trachea) via your nose or mouth. A small camera at the end of the bronchoscope enables the doctor to view your windpipe and air passages (bronchi). It also allows taking samples in the form of biopsies and washings (lavage) through a small channel.

Why is this bronchoscopy necessary?

This test is undertaken to help diagnose your respiratory problem, although sometimes it may not be conclusive. It can also be used to retrieve a foreign body that has been inhaled.

What you need to consider before you come for your procedure

- You must not eat for 4 hours before the test, but you may have clear drinks for up to 2 hours beforehand.
- Because you will be having sedation, it is vital that you arrange transport to and from the hospital and that someone is with you overnight.
If you are unable to keep your appointment, please notify the Endoscopy Booking Department as soon as possible on 0117 4145054. This will enable the staff to give your appointment to someone else and they will be able to arrange another date and time for you.

This procedure requires your formal consent. You will be asked to sign the consent form at the end of this booklet therefore please bring this booklet with you on the day. You will be asked to sign the form in the presence of the doctor.

If you require an interpreter please contact the department in advance on 0117 4145054

What about Medication?

- Your routine medication should be taken.

- If you are diabetic controlled on insulin or tablets please note the advice later on in this booklet. Please ensure the Endoscopy Booking Department is aware that you are diabetic so that the appointment can be made at the beginning of the list.

- Blood thinning medication – your hospital doctor will have advised you whether and when to stop your blood thinning medication if you are on warfarin, clexane, clopidogrel, NOACS (rivaroxaban, dabigatran, apixaban). If you are unsure or you have not been told, please ring your consultant’s secretary.

- Allergies: Please phone the department for information if you have a latex allergy.
What will happen on the day?

- You will have a brief medical assessment by a qualified nurse to confirm that you are sufficiently fit to undergo the investigation.
- The nurse will also confirm the telephone number of the person picking you up so that she can contact them when you are ready for discharge.
- A doctor will then come to talk to you about the procedure and ask you to sign the consent form if you are happy to proceed.

During the procedure

- A cannula (narrow plastic tube) will be inserted in the back of your hand or your elbow crease to allow the administration of intravenous sedation.
- The doctor performing the procedure will spray the back of your throat and nose with anaesthetic throat spray that will make your throat numb.
- Sedation will be administered to make you slightly drowsy but not unconscious. You will still be able to hear the doctor and nurse talking to you. This state is termed co-operative sedation.
- Please note that if you are having sedation you are not permitted to drive, take alcohol, operate heavy machinery or sign any legally binding documents for 24 hours following the procedure and you will need someone to accompany you home. Generally, we advise you to have sedation to help you to relax during the procedure.
The bronchoscopy investigation

- During the bronchoscopy you may feel some slight discomfort as the bronchoscope is passed through your nose or mouth.

- You may cough when the local anaesthetic is administered to your vocal cords and air passages. As the anaesthetic takes effect your throat will relax and you will be able to breathe normally.

- The procedure will take between 10 to 30 minutes

- It may sometimes be necessary to obtain samples either in the form of a lung biopsy or lavage.

**Endo-bronchial biopsy:** A small sample is taken from the inside lining of the air tubes.

**Bronchial brushings:** The doctor passes a small brush over the inside lining of the air tubes.

**Bronchial washings:** A small amount of fluid is put into the air tubes and sucked back through the bronchoscope into a specimen jar.

**Trans-bronchial lung biopsy:** A sample of lung tissue is taken from the outer parts of the lung.

**Trans-bronchial needle aspiration:** A needle is passed through the wall of the air tube to take samples from outside the wall.

**Broncho-alveolar lavage:** Fluid (about 1 cupful) is put into a single small air tube in the lung then sucked back up into a specimen jar. This collects cells from the air sacs of the lung.
Advice for people with diabetes undergoing bronchoscopy

Morning Appointments

**Insulin treated patients:**

- You should have nothing to eat after midnight but may have water until 6:00am.
- Have a suitable drink equivalent to 20g carbohydrate between 6 and 7 am to avoid the risk of hypoglycaemia.
- Omit normal morning dose of insulin prior to the procedure unless taking lantus or levemir.

Inform the nurse immediately of any symptoms of hypoglycaemia. As soon as it is considered safe you will be allowed to eat and drink. Only tea and biscuits are available for patients in the endoscopy department. Please, bring your insulin with you. You should be aware that blood sugar levels may be disturbed by the change in your routine but should return to normal within 24 – 48 hours.

**Tablet treated patients:**

- Hypoglycaemia (low blood sugar) is unlikely to be a problem for patients treated with sulphonylurea tablets e.g. gliclazide, glibenclamide except if fasting is prolonged.
- Omit morning diabetic tablets
- Take your morning tablets as soon as you can eat and drink safely after the procedure followed by breakfast.
Afternoon Appointments

Insulin treated patients:

- You should have nothing to eat at least 4 hours before your appointment, but you can have clear fluids up to 2 hours before.
- Have a suitable drink equivalent to 20gm carbohydrate to avoid the risk of hypoglycaemia between 10:30 and 11:00am.
- Have half the morning dose of insulin with a light breakfast at 8am

Inform the nurse immediately if you feel any symptoms of hypoglycaemia.

You should be aware that blood sugar levels may be disturbed by the change in your routine but should return to normal within 24 - 48 hours.

Tablet treated patients:

- You should have nothing to eat at least 4 hours before your appointment, but you can have clear fluids up to 2 hours before.
- Do not take diabetes tablets before the procedure. You may resume normal medication after the procedure when you are able to eat and drink safely.

Be aware that blood sugar levels may be disturbed by the change in your routine but should return to normal within 24 - 48 hours.
Risks of a bronchoscopy - examination of the tubes in the lungs

There are risks and complications with this procedure. They include but are not limited to the following:

**Specific risks:**

- **Low oxygen levels (hypoxemia):** During the test your oxygen levels are measured and you may be given oxygen.
- **Narrowing of vocal cords (laryngospasm):** This is usually short lived and rarely a problem.
- **Hoarse voice (this usually settles after a few days).**
- **Asthma like reactions:** The air tubes can be narrowed due to irritation by the procedure. This is usually treated with asthma drugs.
- **Damage to dental crowns and teeth – this is very rare.** You will be wearing a mouth guard during the procedure to protect your teeth from damage but also to protect the bronchoscope from your teeth.
- **Rarely, you may get a chest infection**
- **Fever:** This may happen after broncho-alveolar lavage and is treated with paracetamol (panadol).
- **Bleeding:** This can happen after biopsies. Normally it is only minor and settles quickly. If the bronchoscope is passed through the nose then bleeding from the nose may occur. Severe bleeding is rare and is more common after trans-bronchial biopsies. Bleeding is more common if you have been taking warfarin, aspirin, NOACs,
clopidogrel or drugs for arthritis or back pain (NSAIDS). Your doctor should have advised you about this by now, if you have not had any advice regarding this you should ask your doctor.

- Collapsed lung (pneumothorax): A small hole in the surface of the lung can happen after a transbronchial lung biopsy for up to 1 in 20 people. Air then leaks from the lung, causing the lung to collapse. The lung may come back up itself, but for 1 in 2 people who get a collapsed lung, a tube has to be put through the skin, into the chest. This removes the air from around the lung and may need a longer hospital stay. Rarely this can happen up to 24 hours after trans-bronchial biopsy.

- Heart problems: bronchoscopy may put a brief minor strain on the heart. This can cause abnormal beating of the heart. It rarely causes fluid to collect in the lungs, a heart attack, or the heart may stop beating.

- Reactions to sedation or local anaesthetic: can include vomiting and rare allergic reactions.

- Death is extremely rare - about 1 in 2,500.

What happens after the procedure?

- You will need to recover from the procedure in the hospital for 2-4 hours, and may have a chest x-ray to make sure your lung has not collapsed if you have had a trans-bronchial lung biopsy.
As your nose and throat have been anaesthetised you may feel that you cannot swallow properly. This feeling will wear off within approximately 60-90 minutes, after which time you will be allowed a drink.

You may find that your throat feels sore for a day or so.

If you have been given drugs for sedation, for your safety you:

- Should be taken home by a responsible adult.
- Must not drive a car or motorcycle (this is against the law), operate machinery until the following day or for as long as your doctor advises.
- Must not drink alcohol for 24 hours after the procedure.
- Should not make any important decisions or sign any contracts within 24 hours of the test (the drugs used can affect your judgement).

In the 12 hours following the test, you may:

- cough up small amounts of blood.
- have a fever.
- feel sick.
- have a sore throat and hoarse voice.

Contact your doctor or hospital if you have:

- Fever that does not go away.
- Vomiting.
- More than a tablespoon of blood when you cough.
Contact your doctor or hospital immediately if you have:

- Shortness of breath.
- Chest pain.
- Coughed up more than a quarter of a cupful of blood.
- Passed out, or fainted.

How will I know the results of the test?

- You will receive an end of procedure letter prior to leaving that states what your bronchoscopy showed.
- Your hospital consultant may arrange a follow-up appointment when the results will be discussed with you.
Condition and treatment

The doctor has explained that you have the following condition:

(Doctor to document in patient’s own words)

........................................................................................................................................
........................................................................................................................................

This condition requires the following procedure

(Doctor to document - include site and/or side where relevant to the procedure)

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Material risks and procedure options

(Doctor to document in space provided. Continue in Medical Record if necessary.)

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Risks of not having this procedure for the patient

(Doctor to document in space provided. Continue in Medical Record if necessary.)

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Patient consent

I acknowledge that the doctor has explained;

- my medical condition and the proposed procedure, including additional treatment if the doctor finds something unexpected. I understand the risks, including the risks that are specific to me.

- the anaesthetic required for this procedure. I understand the risks, including the material risks that are specific to me.

- other relevant procedure/treatment options and their associated risks.

- my prognosis and the risks of not having the procedure.

- that no guarantee has been made that the procedure will improve my condition even though it has been carried out with due professional care.

- tissues and blood may be removed and could be used for diagnosis or management of my condition, stored and disposed of sensitively by the hospital.

- a doctor other than the Consultant may conduct the procedure. I understand this could be a doctor undergoing further training.

- **I have been given the following Patient Information booklet:** ‘Having a Bronchoscopy- A Guide for Patients’

- I was able to ask questions and raise concerns with the doctor about my condition, the proposed procedure and its risks, and my treatment options. My questions and concerns have been discussed and answered to my satisfaction.
I understand I have the right to change my mind at any time, including after I have signed this form but, preferably following a discussion with my doctor.

I understand that image/s or video footage may be recorded as part of and during my procedure and that these image/s or video/s will assist the doctor to provide appropriate treatment.

Please tick this box to indicate that you are happy that samples obtained during the procedure can be used for research purposes.

On the basis of the above statements,

**I request to have the procedure**

Name of patient: .........................................................................................

Signature: ....................................................................................................

Date: ............................................................................................................
Doctor statement

I have explained to the patient all the above points under the Patient Consent section and I am of the opinion that the patient/substitute decision maker has understood the information.

Name of Doctor: ..........................................................................................

Designation: .................................................................................................

Signature: ....................................................................................................

Date: .............................................................................................................
Patient details

Name of procedure(s) (include a brief explanation if the medical term is not clear)

**Flexible Bronchoscopy**

Inspection of the lower respiratory tract with a flexible endoscope (with or without biopsy, photography).

Biopsy samples will be retained.

Statement of patient

You have the right to change your mind at any time, including after you have signed this form.

I have read and understood the information in the attached booklet including the benefits and any risks.

I agree to the procedure described in this booklet and on the 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.

Where a trainee performs this examination, this will be undertaken under supervision by a fully qualified practitioner.

I would like to have:  Sedation ☐  No sedation ☐

please tick box

Signed       Date

Name (print in capitals)

If you would like to ask further questions please do not sign the form now. Bring it with you and you can sign it after you have talked to the healthcare professional.
Confirmation of consent (to be completed by a health professional when the patient is admitted for the procedure).

I have confirmed that the patient/parent understands what the procedure involves including the benefits and any risks.

I have confirmed that the patient/parent has no further questions and wishes the procedure to go ahead.

Signed

Date

Name (print in capitals)

Job title
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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