Endoscopy department

Bronchoscopy

Important information

Before your appointment

- If you are taking Warfarin please read the ‘Alert for patients on Warfarin’ on page 2 as you may need to have an INR test seven days before.
- All other medication should be taken as normal.
- If you have diabetes please read the advice on pages 6 and 7.
- If you have any questions about the procedure or find that you cannot keep this appointment, please contact the endoscopy office between 09:00 and 17:00 Monday to Friday on 01223 257080.

On the day

- Have nothing to eat or drink for four hours before your appointment.
- Please ensure you are accompanied. We cannot sedate you if you come to the department alone.

At the hospital

- Please come to the endoscopy department, which is on Level 3 of the Addenbrooke’s Treatment Centre (ATC).
- Use the ‘Car Park 2’. Take your parking ticket and appointment letter to the ATC reception desk to obtain discounted parking.
- **Please note that the appointment time is for your pre procedure check, not the time of your examination.** The length of time you will be here will vary enormously but may be anything from two to four hours or more. Please ask your admitting nurse for further information during your admission check.
Alert for Endoscopy patients on Warfarin or Clopidogrel or other anticoagulant medication

You must read this guidance before your procedure.

If you have any questions or do not know whether to stop your medication before your Endoscopy please phone 01223 216515

<table>
<thead>
<tr>
<th>Warfarin: for patients advised to continue medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You should have an <strong>INR test seven days</strong> before the endoscopy.</td>
</tr>
<tr>
<td>• If that <strong>INR result</strong> is <strong>3.0 or less</strong>, continue with your usual daily Warfarin dose.</td>
</tr>
<tr>
<td>• If that <strong>INR result</strong> is <strong>more than 3.0</strong>, ask your supervising anticoagulant service for advice to <strong>reduce your daily Warfarin dose</strong> so that your INR is 3.0 or less when you have the endoscopy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warfarin: for patients advised to stop medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You should <strong>stop Warfarin five days</strong> before the endoscopy.</td>
</tr>
<tr>
<td>• After the endoscopy go back to your usual daily dose as soon as you are eating again (that will usually be the same evening).</td>
</tr>
</tbody>
</table>

You should have your INR checked one week later to ensure you are adequately anticoagulated again.

If you have:
- metal mitral valve
- metal valve + previous stroke/thrombosis
- valvular heart disease

you may need Heparin injections instead of Warfarin. Ask your local anticoagulant service for advice.

<table>
<thead>
<tr>
<th>Clopidogrel: for patients advised to continue medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue with your usual dose.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clopidogrel: for patients advised to stop medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You should stop <strong>Clopidogrel seven days</strong> before the Endoscopy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other anticoagulant medication:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acenocoumarol, sinthrome, phenindione, dindevan: If you are taking any of these please contact the Endoscopy department 01223 216515</td>
</tr>
</tbody>
</table>
What is a bronchoscopy?

Your doctor has requested this procedure to help investigate and manage your medical condition.

Bronchoscopy is a procedure that allows the endoscopist to look directly at the passages that take air into your lungs. These airways include the trachea (windpipe) and the bronchi (branches of the airways). The bronchoscope is a long flexible tube, about the width of a thin pencil, with a light at the end. It is passed either through your nose or through your mouth, past your larynx (voice box) down your trachea and into the bronchi. The lining in these areas can be checked to see if there are any problems in your respiratory (breathing) system. The procedure can take between 15 and 20 minutes.

Sometimes it is helpful to take a biopsy – a sample of the lining. This is done by passing a small instrument through the bronchoscope to ‘pinch’ out a tiny bit of the lining (about the size of a pinhead) which is sent to the laboratory for analysis. Occasionally the area we need to biopsy is difficult to reach in which case we might need to use x ray equipment to help us identify it. This is called a transbronchial biopsy.

Getting ready for the procedure

Wear loose fitting washable clothing and leave valuables at home.

On arrival to the department we will explain the procedure to you and ask you to sign a consent form. You can change your mind about having the procedure at any time.

Most patients who have a bronchoscopy will be given a local anaesthetic to the nose and back of the throat. You will also be given an intravenous sedative (an injection into a vein) to make you feel relaxed and sleepy (this is not a general anaesthetic) and may mean that you are not aware of the procedure. The sedative will continue to have a mild sedative effect for up to 24 hours and may leave you unsteady on your feet for a while.

You must arrange for a responsible adult to come with you and wait to take you home. You will not be able to drive yourself. If you come without an escort, we will have to cancel the procedure. If you are entitled to use hospital transport, an escort is not required.

During the procedure

For your comfort and reassurance, a trained nurse will stay with you throughout. In the procedure room, you will be asked to remove false teeth and glasses, made comfortable on a couch in a sitting or lying position.

The endoscopist will give you the intravenous injection and throat spray. If the tube is being inserted into your nose local anaesthetic jelly will be used to numb your nasal passage. If the tube is being inserted into your mouth a plastic mouth guard will be placed gently between your teeth. This is to keep your mouth open so that you do not bite the bronchoscope. We will also put a plastic 'peg' on your finger to monitor your pulse and oxygen levels.
As the bronchoscope is gently inserted, more local anaesthetic will be given to numb the larynx (voice box), this may make you cough a little. As the local anaesthetic takes effect, your throat will relax. We will give you extra oxygen by putting a soft plastic tube just inside your nose.

Minimal restraint may be appropriate during the procedure. However, if you make it clear that you are too uncomfortable the procedure will be stopped.

When the procedure is finished, the bronchoscope is removed quickly and easily.

**Potential problems**

Bronchoscopy procedures carry a small risk (less than one in 1000 of major haemorrhage (bleeding).

If you had a transbronchial biopsy, there is a risk of leakage of air from the lung (one in 30) which may cause the lung to collapse. These leaks often seal up quickly on their own, however in a small proportion of these cases, we might need to insert a chest drain (a tube) to remove the unwanted air in the chest area. In order to detect a leak you will have a chest x-ray about an hour after your procedure, and if a leak is detected you will be admitted to hospital.

There may be a slight risk to teeth, crowns or dental bridgework; you should tell the nurse if you have any of these.

Other rare complications of this procedure include aspiration pneumonia (inflammation of the lungs caused by inhaling or choking on vomit) and adverse reactions to the intravenous sedative drugs. Like all tests this procedure will not always show up all abnormalities and, on very rare occasions, a significant abnormality may not be identified. If you have any questions about this please as either at the time of the procedure or the person who referred you.

**After the procedure**

After the bronchoscopy, you will be taken to a recovery area while the sedation wears off. When you are sufficiently awake, you can go home. We advise you not to eat or drink for about two hours as is not safe until full sensation has returned. You are also advised not to drive, operate machinery, return to work, drink alcohol or sign any legally binding documents for the next 24 hours. You are advised to have a responsible adult stay with you for the next 12 hours.

You may have a sore throat and/or hoarse voice and a slight nosebleed. If we take some biopsies, you might find some streaks of blood in your phlegm. These are quite normal and usually stop within 24 hours.

If you have any of the following you should contact your GP, the endoscopy department or the Accident and Emergency department
- Pain when breathing, either in your chest or shoulder,
- Difficulty breathing or expanding your lungs
- Persistent or increased bleeding
When do I know the result?
The endoscopist will give you information about the procedure at the bedside in the recovery area but if you would like more privacy, we will take you to a separate room. If you had sedation, it is a good idea to have someone with you when you talk to the endoscopist because the sedation can affect your ability to remember the discussion.

Final results from biopsies will be given to you either by the healthcare professional who requested the procedure at a clinic appointment or by letter. These results can take several weeks to come through. You should discuss details of these results and any further treatment with that person.

Alternatives:
There are no real alternatives to having a bronchoscopy. In some cases, depending on individual factors such as the symptoms present and the condition being investigated, a CT scan may be appropriate.

For more information:
- Contact the endoscopy office between 09:00 and 17:00 on Tel: 01223 257080.
- See www.addenbrookes.org.uk/consent

References
www.brit-thoracic.org.uk
Diabetic advice - morning appointment

Please follow these instructions if you have diabetes which is controlled with insulin or tablets.

If you have any questions related to your diabetes during this preparation, please contact your GP or the diabetes specialist nurse on 01223 245151 bleep 152078.

Food and drink

- Do not eat for six hours prior to your appointment.
- Do not drink for three hours prior to your appointment.
- Test your blood glucose regularly. If it drops below four, please treat with a sugary drink such as lucozade 100ml, apple or grape juice 200ml, until your level is five.
- After your procedure, you may eat and drink normally unless specifically told otherwise.

Insulin and tablets

Please adjust your normal insulin and tablet doses as instructed below.

If you take insulin once daily

- No change to insulin dose necessary.

If you take insulin twice daily

- Do not have your morning insulin. Bring it with you, plus something to eat.
- If you are able to eat before 11:00, have your normal morning dose with food.
- If you are able to eat after 11:00, have ½ your normal morning dose with food.
- Have your normal evening dose.

If you take insulin four times daily

- Do not have your morning insulin. Bring it with you, plus something to eat.
- If you are able to eat before 11:00, have your normal morning dose with food.
- If you are able to eat after 11:00, omit your breakfast dose and have your normal lunchtime dose with food.
- Have your normal tea time and bedtime evening doses.

If you take tablets for diabetes

- Do not have your morning diabetic tablets.
- After your procedure, re-start your tablets at the next dose time.
Diabetic advice - afternoon appointment

Please follow these instructions if you have diabetes controlled with insulin or tablets.

If you have any questions related to your diabetes during this preparation, please contact your GP or the diabetes specialist nurse on 01223 245151 bleep 152078.

Food and drink

- Do not eat for six hours prior to your appointment.
- Do not drink for three hours prior to your appointment.
- Test your blood glucose regularly. If it drops below four, please treat with a sugary drink such as lucozade 100ml, apple or grape juice 200ml until your level is five.
- After your procedure you may eat normally unless specifically told otherwise.

Insulin and tablets

Please adjust your normal insulin and tablet doses as instructed below.

If you take insulin once daily

- No change to insulin dose necessary.

If you take insulin twice daily

- Have your normal morning insulin dose unless your breakfast is smaller than usual. If so reduce your normal dose by half.
- Have your normal evening dose.

If you take insulin four times daily

- Have your normal morning insulin.
- Do not have your lunchtime insulin.
- Have your normal tea time and bedtime evening doses.

If you take tablets for diabetes

- Do not have your morning diabetic tablets.
- After your procedure, re-start your tablets at the next dose time.
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

Document history
Authors
Endoscopy department
Department
Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ www.cuh.org.uk
Contact number
01223 245151
Publish/Review date
October 2015/October 2018
File name
PIN0653_Bronchoscopy_V5
Version number/Ref
V5/PIN0653