Endobronchial Ultrasound (EBUS)

Here are some words to help you understand this procedure:

<table>
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<tr>
<th><strong>Ultrasound:</strong></th>
<th>A device that produces sound waves. The sound waves create pictures of organs and structures inside the body which the doctor can see on a TV screen.</th>
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<td><strong>Mediastinum:</strong></td>
<td>A group of structures in the centre chest.</td>
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<td><strong>Lymph nodes:</strong></td>
<td>Lymph nodes are small ball-shaped organs found all over the body. They are part of the immune system. Often, lymph nodes become enlarged or inflamed when there is a problem. EBUS looks at lymph nodes around the breathing tube (trachea), food tube (esophagus) and the area between the lungs.</td>
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<td><strong>Biopsy:</strong></td>
<td>A procedure done by the doctor where a small sample of tissue is taken and sent to the laboratory for testing. You can have one or more biopsies taken.</td>
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**What is EBUS?**

EBUS is a way of looking inside and around the airways to identify lymph nodes in the mediastinum and take biopsies when needed. EBUS is done for many reasons. Your doctor will tell you why you are having this procedure.

There are 2 steps to this procedure. The doctor looks inside the airways of the lungs first using a tube called a bronchoscope. Pictures are sent to a television monitor as the scope goes down. The doctor then inserts the EBUS scope. The doctor presses a button on the scope and the ultrasound begins. Sound waves bounce off the structures in the area and produce pictures on the monitor for the doctor to see. Biopsies are then done and sent to the lab for testing.
EBUS takes about 20 minutes to do but plan to be at the hospital 2½ to 3 hours.

**Are there any complications to this procedure?**

Before you sign a consent form, your doctor should explain the problems that can occur. Complications are rare but include:

- Discomfort and coughing during the procedure caused by having a tube in your throat. Anaesthetic spray or gel helps control this.

- The scope or biopsy instrument can tear or perforate the lining of the airway or puncture a lung. This is rare. If a lung is punctured, air may leak outside the lung and cause the lung to collapse. This may need treatment and a chest tube may need to be put in to remove the air.

- There can be bleeding after a biopsy. Bleeding can be stopped during the procedure. Rarely further treatment is needed.

- Infection is rare and is treated with antibiotic medication when needed.

- If you have an intravenous tube in your arm, you can get a lump or bruise on the skin. This can take a few days to a few months to go away.

- You may have a reaction to the medication used to relax you. The doctor and nurses can manage any complication that may happen. Tell the staff if you have ever had an allergic reaction to any medications or dyes.

**Getting Ready at Home**

**Medications and allergies:**

Your doctor may want you to stop taking certain medications, such as blood thinning medication, 4 to 7 days before the test. Contact the doctor doing the procedure at least 1 week before to ask about your medications.

Prepare a list of the current medications you take and any allergies you have. Include herbal products and over the counter medications on your list. You can ask your pharmacist to print a copy of your medication record for you. Bring this list or your medications to your procedure.

**Prepare and bring all health insurance information to the hospital such as:**

- your Ontario Health Insurance card and
- any other insurance papers such as Blue Cross, Metropolitan etc.

**Plan ahead:**

- You must arrange for someone to take you home after the procedure.
- **You cannot leave the hospital alone or drive for 24 hours.**

- If you plan to take a taxi home, you still need to have someone with you.
- Make your plans ahead of time.
Before Coming to the Hospital

Eating and drinking:
- If your test is in the morning before 12:00 noon, do not have anything to eat or drink after midnight.
- If your test is booked after 12:00 noon, you may have 1 glass of clear fluid at 6:00 a.m. Clear fluids are black tea and coffee, water and apple juice.

Getting to the hospital:
- Your driver can drop you off at the front of the hospital off Charlton Avenue East. Your driver can then park in the Visitors parking ramp off James Street South.
- If English is not your first language, please bring someone who can interpret for you.

At the Hospital

Registration:

When you arrive at the Endoscopy Unit on Level 3 of the Sister Mary Grace Wing, register in Room 318.

Plan to be at the hospital about 2½ to 3 hours. There are many doctors and patients in this unit so patients may appear to go in “out of order”.

In the Endoscopy room:
The nurse will ask you some questions and do a nursing history. The nurse will review your allergies and medications with you and help you get ready. You will wear a hospital gown. You will remove your glasses and dentures just before the procedure.

You will have a thin tube put into your arm called an intravenous line. This is used to give you medication. Your blood pressure, heart rate and oxygen levels will be checked.

What happens during the procedure?
Oxygen may be given by 2 small prongs in your nose. Your doctor gives you sedation so you will feel more relaxed or even sleepy during the procedure. The doctor then freezes the back of your throat with a local anaesthetic to control discomfort. The scope is placed through your mouth and guided down the airway. There is a nurse in the room helping you and the doctor. The procedure may feel uncomfortable but is not painful.
After the Procedure

Resting:
You will need to rest for up to 1 hour in the unit to allow sedation and anesthetic to wear off before you go home.

Drinking and eating:
Your doctor or nurse will tell you when it is safe to drink and eat after the test. The anaesthetic in the back of your throat needs time to wear off before you can swallow safely. It takes about 1 hour to wear off.

Your throat:
Your throat may be sore or your voice hoarse when the anaesthetic wears off. This will soon go away. You can help your throat feel better by:
• sucking lozenges
• gargling with warm salt water
• drinking warm liquids

After sedation:
• You must have someone give you a ride home.
• Do not drive, operate machinery, drink wine, beer or alcohol or make major decisions for at least 24 hours after sedation.
• You can return to work the next day.
• You can return to all of your normal activities the next day.

What to watch for at home:
After the procedure, you may have some pink coloured secretions, cough up bright red blood or have a fever. If any of these get worse call your doctor.

Call the doctor who did the procedure if you:
• have prolonged face, neck, throat or chest discomfort
• have trouble breathing or swallowing
• cough up more than a teaspoonful of bright red blood
• have any concerns or questions

If you have any questions about this procedure, call the doctor or health care provider that ordered this test.