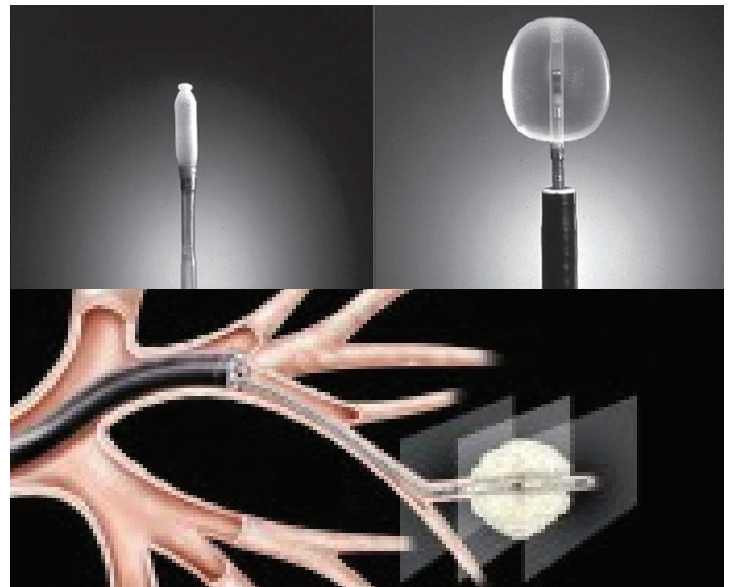


Patient information sheet and consent form

Radial Probe EndoBronchial UltraSound

You have been recommended by your Respiratory or Cancer Specialist to undergo a Radial probe EBUS procedure.

This is a bronchoscopic procedure. It requires a standard bronchoscope, which is inserted through your mouth, into your breathing passages (airways of the lungs), with a mini-camera at its tip allows the doctor to look into the airways through a video monitor. The radial probe can be introduced through the working channel to visualise the lesion. A sheath can be left in situ to localise and stabilise the lesion during the subsequent introduction of forceps or brush for sampling.



Why do I need a radial EBUS-TBNA?

Radial probe EBUS can be used to localize peripheral pulmonary nodules and sampling of the lesion can be done without fluoroscopy or CT guided biopsy, thus reducing radiation exposure. Most of the time, this test would provide useful information for your treating doctor. Very occasionally, additional test may be required.

Are there any alternatives?

CT (computer tomography) and fluoroscopy can guide the doctor to peripheral lesions, but involves higher radiation exposure.

Radial probe EBUS is a relatively new procedure to sample these peripheral lung lesions. Under ultrasound imaging, pulmonary masses have different appearance to surrounding lung.

What do I need to do to prepare for the bronchoscopy?

Radial probe EBUS is usually a day-only outpatient procedure.

You will receive instructions about when to not eat and drink (nil by mouth), taking your regular medicines, smoking and removing any dentures before the procedure. You are usually required to be nil by mouth for at least 4 hours before the test.

Please let the doctor on blood thinning medications, any allergies or if you may be pregnant, a diabetic or recent heart attack (within 6 weeks).

Please let us know if you suffer from asthma, or chronic obstructive pulmonary disease. Inhaled or nebulised medicine may be given to "open up" the airways prior to the procedure.

Please bring along any relevant scans (films or imaging discs) on the day of procedure.

Please let us know before you come for your procedure if you will need an interpreter.

On the day of the procedure, please come to the reception desk at:

Preadmission Clinic on level 3, **Sutherland Hospital;**

or

Ground Floor, **Hurstville Private Hospital**

at the time you have been given. A nurse will greet you and make you comfortable and take your blood pressure, temperature and pulse, and ask you questions about your medical history. The nurse or doctor will insert a small plastic tube into your hand or arm so that we can give you sedation and any other medication during the procedure.

How is sedation achieved?

Procedural sedation involves the use of short-acting analgesic, muscle relaxants and sedative medications, given and supervised by an anaesthetist. Serious complications rarely occur and no deaths had been reported in multiple studies.

You will receive information from the anaesthetist prior to the procedure, whom will further explain and discuss these risks.

■ What happens during a Radial probe EBUS?

You will be lying down with the head of the bed tilted up slightly. The anaesthetist will also spray the back of your throat with local anaesthetic agents, to make it numb. Once adequate sedation is reached, the anaesthetist will place a breathing tube through your mouth into your throat, to help you breathe. A bronchoscope is then placed through the breathing tube into the airways. Under imaging, the doctor will be able to find the peripheral lung mass next to the airways with the radial ultrasound probe, and once position is confirmed, take samples from it.

The procedure will take anywhere between 30 – 60 minutes, depending on how long it takes for the medicine to take effect, and what needs to be sampled.

■ What are the risks?

Radial probe EBUS is a safe procedure, very similar to a bronchoscopy procedure. Serious risks, such as air leak or serious bleeding are uncommon and less than 5%. Other more common minor risks include:

Minor complications

Discomfort and coughing - While the bronchoscope is passed through your throat into the lungs, it may cause some discomfort. It may also tickle your airways, causing a cough. A small number of patients are troubled by a sore throat after the procedure but this usually settles within 48 hours.

Infection - Many patients suffer from a fever and mild sweating, between 6-12 hours after the bronchoscopy. This goes away by itself without any treatment and is not a sign of an infection. Infection risk is approx. 2-3% and usually treated with a course of oral antibiotics.

Reduced oxygen - Your oxygen level will be continuously monitored during the procedure. The level of oxygen in the blood may fall during the procedure for several reasons. The bronchoscope may block the flow of air into the airway, or small amounts of liquid used during the test may be left behind. This drop is usually mild, and the level usually returns to normal without treatment. If the oxygen level remains the doctor will give extra oxygen or stop the test to allow for recovery.

Moderate complications

Bleeding - Bleeding can occur after the doctor performs the biopsy. Usually bleeding is inside the lymph glands and will stop without treatment.

Serious complications

Death - described as occurring in around 1 in 10,000 cases. Almost always, however, the patients who have died from bronchoscopy have been very ill in hospital beforehand, and have not been having the procedure as an outpatient.

■ What happens after the procedure?

Patients vary in their wake-up times. If you are an outpatient or a non-critically ill inpatient, you will need to stay in the recovery area for an hour or more before the sedative has worn off. You will also need to wait 60-120 minutes, or until the numbness wears off, before drinking any liquids. At this time a "Sip Test" is performed to ensure there is no risk of choking or aspiration. If you are an outpatient, it is recommended that you bring someone along to drive you home.

Lab results take more time, usually 1–4 days or more depending on the specific test that is being done. You will be given an appointment with your specialist to discuss the results

Watch out for the abovementioned complications; contact your doctor immediately if you have any concern. You will be given on written instruction when you leave the Treatment Centre. Please follow these carefully.

SUMMARY GUIDE

You are scheduled to have a bronchoscopy, a procedure that your doctor performs to examine your airways or take samples from your lungs.

- ☑ Do not eat for 6 hours or drink for 2 hours before the procedure.
- ☑ Review your medication schedule and smoking activity with your doctor.
- ☑ After the procedure, do not drink for ½ to 1 hour or until the numbness completely wears off.
- ☑ Do not drive home by yourself for 24 hours after the procedure; arrange for a family member or friend to take you home.
- ☑ Contact your doctor immediately if you have shortness of breath or chest pain, or you cough up more than a few tablespoons of blood at home.

If you have any questions or concerns, please contact:

Your respiratory consultant or registrar on call via switch

Sutherland Hospital

Tel: 02 9540 7111

Southern Interventional Respiratory (Hurstville Private Hospital)

Tel: 02 9570 4800

Patient Instruction after a Radial Probe EBUS

The responsible adult escorting you home should also be aware of the following instructions.

The effect of the sedation can take some time to wear off and your memory loss may persist longer than the sedation. Your escort needs to know that you may not carry out instruction even though you appear to acknowledge them.

Your throat might be a little sore and this will wear off. You may also cough, and even cough up a small amount of blood and again this usually does not require treatment.

You can resume eating a normal diet after the "Sip Test" unless the doctor today advises otherwise.

**SEDATION WILL AFFECT YOUR JUDGMENT FOR ABOUT 24 HOURS.
DURING THIS TIME FOR YOUR OWN SAFETY AND IN SOME CASES LEGALLY:**

- DO NOT drive any type of car, bike or other vehicle and take extra care as a pedestrian
- DO NOT operate machinery
- DO NOT drink alcohol
- DO NOT use cooking appliances or handle dangerous items such as boiling water
- DO NOT make critical decisions or sign a legal document
- DO NOT do activities that require coordination or balance
- Ensure that you have a responsible adult to care for you until tomorrow
- Rest at home for the remainder of the day

Your doctor may prescribe you medication for pain or other indications:

- Take medication prescribed

SEEK MEDICAL ADVICE FROM YOUR GP or HOSPITAL IF YOU NOTICE ANY OF THE FOLLOWING:

- Have trouble swallowing / breathing / speaking
- Sharp pain in the throat or chest
- Begin coughing up more than a few tablespoons of blood
- Have a high temperature or fever $>38^{\circ}\text{C}$
- Have redness, pain or swelling for more than 48 hours where you had the injection for sedation (hand or arm)
- Any symptoms that you think is related to today's procedure and is causing you serious concern

Please ensure you have an arranged follow up with your respiratory specialist within 2 weeks of the procedure.

If you have any questions or concerns, please contact:

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Tel: 02 9570 4800