



SYDNEY
RESPIRATORY
SPECIALIST

Care Exceeding Expectations.

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Respiratory and Sleep Physician

Radial EBUS Patient Information Sheet

What is Radial EBUS?

- **Radial EBUS (Radial Endobronchial Ultrasound Guided Biopsy)** is a minimally invasive bronchoscopy procedure. Radial EBUS is used to sample peripheral lung masses or nodules, often for diagnosing and evaluating lung conditions like cancer.
- Radial EBUS has a flexible wire-like ultrasound to examine abnormal lung masses or lung nodules. Radial EBUS ultrasound provides real-time imaging to locate and guide biopsies of lung lesions. There is a guide sheath around the ultrasound that is placed directly within the lung mass or nodules. This guide sheath assists in accurately directing biopsy instruments to the desired location.
- **Imaging Guidance: Cone Beam CT (CBCT)** is a CT scan that is performed whilst you are under anaesthesia to accurately locate the airways leading to the lung mass as well as identify that the biopsy tools are accurately placed inside the lung mass. There is minimal radiation exposure.
- Radial EBUS can be performed with or without CBCT based on the clinical situation.

Proceduralist experience.

Your proceduralist is Dr. Herath. Dr Herath with over 2000 EBUS procedures and international training, performs this procedure with high success rates.

There are two types of EBUS:

- **Linear EBUS:** For diagnosing glands and masses around large windpipes.
- **Radial EBUS:** For diagnosing lung nodules in smaller, peripheral windpipes.
- **This document focuses on Radial EBUS**

Conditions Treated with Linear EBUS:

- Diagnoses lung cancer, infections, and diseases like sarcoidosis and tuberculosis.
- Less invasive than conventional methods like surgical lung biopsy.

Biopsy Methods with Radial EBUS:

- **Cryobiopsy “cold biopsy”:** Uses extremely cold thin wire that is 1.1mm to obtain larger tissue samples.
- **Forceps Biopsy:** Collects small tissue samples using forceps.
- **Needle Aspiration:** Aspires cells or tissue fragments for analysis.
- **Cytology Brush:** Collects surface cells for diagnostic purposes.

Procedure Details:

- **Anaesthesia:**
 - The procedure will be performed under general anaesthesia.
- **Locations:** Macquarie University Hospital, Sydney Adventist Hospital, Northern Beaches Hospital.
- **Timing:** Takes 30-45 minutes; day procedure with a 2-hour recovery period.
- **Pre-Operative Assessment:** If you have multiple medical conditions, a pre-operative assessment with an anaesthetist may be required. Dr Herath will organise this assessment on your behalf.

Preparation:

- Fast for 6 hours before the procedure for both food and fluid.
- Stop blood thinners 5 days prior.
- Continue aspirin if you are on aspirin.
- Avoid diabetic medications on procedure day. Some diabetic medications need to be stopped 3 days before the procedure. Inform your Respiratory Physician of all the diabetic medications you are taking.

Patient information sheet: Sydney Respiratory Specialist Clinic.

- Arrange for a driver to take you home and someone should stay with you overnight.
- Quitting smoking beforehand helps reduce discomfort.

Procedure Day:

- **Duration:** EBUS typically takes 30-45 minutes. Arrive an hour before the procedure.
- **Recovery:** After the procedure, a "sip test" will be conducted to check swallowing. If successful, a light snack will be provided before discharge.

Side Effects: Please see below chart

- **Common:** Cough, sore throat, tiredness, flu-like symptoms.
- **Rare:** Infection, shortness of breath, coughing up significant blood.

Post-Procedure:

- **Home Care:** Arrange for someone to drive you home and stay with you for the day. Bring any necessary respiratory equipment.
- **Overnight Stay:** Some patients may need to stay overnight for monitoring, depending on their medical condition
- Return to work and normal medications the next day.
- Can restart blood thinners the next day.
- Preliminary results are available the same day; final results are discussed in a follow-up appointment.
- Please make a follow-up appointment with your respiratory physician in 1 week from the procedure.

Combined Linear and Radial EBUS:

- Performs both types in one session for patients with suspected lung cancer or nodules.
- Saves time and reduces the need for separate procedures.

Medicare/Health fund Item Number:

- MBS item number 38417 for health fund claims.
- Dr Herath does not charge a gap for your procedure and all claims will be made directly to the health fund and Medicare

- You may incur separate fees for anaesthesia, pathology, and radiology, which are beyond the control of the Sydney Respiratory Specialist clinic.

Additional Information:

- This sheet provides an overview of the Radial EBUS procedure.
- For further questions or clarifications, consult with your Respiratory Specialist.

Common side effects during or immediately after the procedure	What to Do?
Cough post procedure Coughing blood mixed with sputum	Self-resolve over 24h
Tiredness	Self-resolve in 24h
Sore throat	Difflam lozenges or throat spray for 48h
Feeling as if you have flu (30% of patients after a wash/lavage)	Take paracetamol Take your temperature This should be below 38.5 C
Bleeding during procedure	We are prepared for a bleed specially during a biopsy.
Air leak outside the lung	If we anticipate an air leak, we will perform an ultrasound or a Chest X-ray to find out if this had occurred prior to discharge

Rare side effects, once you leave the hospital	What to Do?
Infection and fever post procedure	Occurs 2-4 hours post procedure in 3% patients If you have fever >38.5 or feel unwell, you will need IV antibiotics and fluids. Please return to emergency department of the nearest hospital.
Shortness of breath/chest pain after going home	Shortness of breath is also a sign of pneumothorax or air leak outside the lung. If this occurs, please report to the nearest hospital emergency department.
Coughing up frank blood more than a tablespoon	Coughing up frank blood more than a tablespoon is not normal. This is a sign of a larger bleed inside the lung. Please report to the nearest emergency department.

Thank you for choosing Sydney Respiratory Specialist Clinic for your bronchoscopy procedure. We appreciate your trust in our care and are committed to providing you with the highest quality of service and support.

For any queries and follow up appointments please contact: 02 9487 8373.