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Airway Debulking and Stent Placement- Patient Information Sheet

Overview: Airway debulking and stent placement is a bronchoscopic procedure to treat and manage conditions that cause narrowing or blockage of the airways within the lungs.

Airway Debulking:

- A thin, flexible tube called a flexible bronchoscope is used with specialized tools to remove or reduce obstructions in the airways, such as excessive mucus, growths, or tissue.
- There is anticipated bleeding during this procedure. To assist with multiple instrument placement to remove the tumours like laser, APC (Argon Plasma Coagulation), hot biopsy forceps as well as bleeding control methods like suction tubing and balloon blockers, a rigid tube called rigid bronchoscope is also used in combination with the flexible bronchoscope. (please see the separate information sheet on rigid bronchoscopy)
- Debulking is reducing the entire tumour or the bulk of the tumour. Often debulking is adequate to open the airways.
- Occasionally the airways may collapse or the debulking is not adequate to secure an open airway- then an airway stent is placed to keep the windpipe open.

Stent Placement:

- After debulking, a stent (a small, tubular metal device) may be inserted into the airway to maintain its shape and prevent further blockages.
- If a stent is inserted, it is important to follow the care plan to look after the stent- Separate Instructions will be given to you on this.

Indications for the Procedure:

- **Airway Tumours:** To remove or reduce tumour growth in the airways.
- Tracheal Stenosis: To treat narrowing of the windpipe (trachea).
- Bronchial Stenosis: To treat the narrowing of the bronchial tubes.
- **Airway Obstruction:** To address airway obstructions caused by mucus, infection, or inflammation.
- Fistula Formation: To treat abnormal connections between the airways and other structures, usually the oesophagus, due to tumours or following radiotherapy.

Risks: Please see the chart below.

- Common: Sore throat, low-grade fever, coughing up a small amount of blood post-procedure.
- Serious: Significant bleeding, pneumothorax, lung collapse (may require a chest tube), complications related to general anaesthesia.

Preparation:

- Medication and Food Restrictions:
 - Share a list of all medications, including blood thinners, vitamins, supplements, and over-the-counter medications, with your medical team.
 - Continue aspirin but stop blood-thinning agents as advised.
 - Do not take diabetic medications on the morning of the procedure.
 - Follow specific instructions regarding medication adjustments.
 - Undergo pre-operative assessment if you have multiple medical issues.
 - Perform a mandatory breathing test before the procedure.
 - A recent CT chest within the last 1 month should be available prior to the procedure.

Procedure Duration and Hospital Stay:

The procedure typically lasts 60 minutes.

- Requires one-night elective ICU stay for monitoring due to delayed pneumothorax or bleeding risks.
- Discharge the next morning after a chest X-ray.
- Bring any home respiratory equipment (e.g., oxygen, CPAP machine) for post-procedure recovery.

Care at Home:

- Use Difflam throat lozenges for a sore throat.
- Drink plenty of fluids.
- Resume normal activities in 1-2 days.

Results:

- Available within one week
- Please make an appointment with your Respiratory specialist, one week after the procedure to discuss the results and start treatment

Medicare/Health fund Item Number:

- MBS item number 38425 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 information sheet is designed to help patients and caregivers understand the debulking and stent procedure and what to expect.
- It is crucial to discuss the procedure, potential risks, and specific instructions with your respiratory specialist beforehand.
- If you have any specific questions or need further information, please consult 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. There will be a balloon blocker inserted into the lung to occlude any bleeding post biopsy
Air leaks outside the lung. The risk of an air leak . Half of these air leaks require the insertion of a chest drain to remove the air. If this occurs you may be requested to stay in the hospital for 2-5 days.	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.