

Fact Sheet on Paediatric Flexible Bronchoscopy

Introduction

Flexible bronchoscopy is a procedure where a thin and flexible tube is passed through the nostril or the mouth into the tracheo-bronchial tree. It enables the doctor to perform examination of the upper airway and the tracheo-bronchial tree under direct vision.

Indications

- Diagnostic
 - Stridor
 - Dyspnoea or recurrent wheeze
 - Chronic cough
 - Hoarseness of voice
 - Dysphagia
 - Haemoptysis
 - Abnormal chest x-ray findings
 - Endotracheal biopsy/broncho-alveolar lavage
 - Other chest diseases where direct examination of the airway is necessary

- Therapeutic
 - Removal of retained or impacted secretions
 - Haemostasis
 - Removal of foreign object
 - Guided intubation

Before the Procedure

- Blood sampling may be necessary before the procedure depending on underlying condition.
- You are advised not to take any solid foods/formula milk 6 hours, breast milk 4 hours and any clear fluids 2 hours before the procedure.
- Check for any loose teeth

During the Procedure

- Blood pressure, pulse rate and oxygen saturation are closely monitored.
- Patient is kept in the supine position.
- Supplementary oxygen and/or assisted ventilation may be provided, as needed
- Nostrils may be sprayed with local anaesthetic agent to reduce discomfort.
- Intravenous sedation or general anesthesia may be required.
- The bronchoscope is inserted through the nostril or mouth into the tracheo-bronchial tree for examination. Biopsies, bronchial brushing and bronchoalveolar lavage may be taken for laboratory evaluation.
- Airway irritation resulting in coughing may happen during the procedure.

Potential Risks and Complications

- Related to the procedure
 - Minor
 - Fever (Common with BAL. Uncommon without BAL)
 - Isolated excessive coughing (Uncommon)
 - Excessive nausea reflex with coughing (Uncommon)
 - Epistaxis (Uncommon)
 - Infection (Uncommon)
 - Transient laryngospasm (Rare)
 - Major
 - Significant desaturation SpO₂ <90% (Uncommon)
 - Bleeding (Uncommon without biopsy)
 - Arrhythmia (Uncommon)
 - Pneumothorax (Rare)
 - Death (Extremely rare)

After the Procedure

- Remain fasting after the procedure until fully awake, or otherwise instructed.
- Feeling of dizziness may occur if sedation is given for the procedure. Bed rest is recommended.

Follow Up

- Slight sore throat and coughing with blood stained sputum may be expected for a short period of time.
- Chest x-ray may be required depending on situation
- Patients with potential risks may be hospitalized for observation of complications such as significant bleeding or pneumothorax

Remarks

- The list of complications is not exhaustive and other unforeseen complications may occasionally occur. For further information, please contact your doctor.
- This leaflet is written in English language with a Chinese translation. If there is any discrepancy between the English and the Chinese version, the English version prevails.