

## 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 SpO<sub>2</sub> <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.