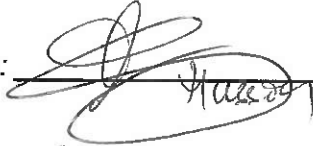






PROCEDURE FOR FLEXIBLE BRONCHOSCOPY IN THE OUTPATIENTS DEPARTMENT (OPD)	
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New HSE Standards	To bring in line with new standards
Update to: Definition of Guidelines, Equipment, Procedure & Reference	

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1.0 Introduction

Flexible bronchoscopy is commonly used in paediatric Ear, Nose & Throat (ENT) for diagnostic purposes.

2.0 Definition of Guidelines

Flexible bronchoscopy is the use of a flexible fibre optic endoscope to evaluate upper airways: - nasal passages, nasopharynx, oropharynx and larynx (Burton 2000). Flexible bronchoscopy is an essential diagnostic tool in children and helpful in assessing the structure of the airway (Mandal et al 2019).

3.0 Complications Associated with Flexible Bronchoscopy (This is not an exhaustive list)

While the procedure is **low-risk, gagging, nosebleeds or coughing** may occur as the endoscope is threaded through a nostril. Nevertheless, while the procedure is considered very safe, bleeding can occur, but very rarely (Burton 2000).

4.0 Specific Considerations

A flexible bronchoscopy does not require any special precautions to be taken prior to the procedure. However, a nasal spray or topical decongestant such as a nasal vasoconstrictor and topical anaesthetic (numbing medicine) may be inserted inside the nose prior to the procedure. The medication has an unpleasant taste and may cause numbness in the throat for 20 minutes. If this nasal spray is used, the patient should fast for 20 minutes following the procedure. Nasal spray are rarely administered to infants and may be used in older children.

5.0 Indications for Flexible Bronchoscopy (This is not an exhaustive list)

- Noisy breathing
- Loss of voice
- Weak cry
- Hoarseness


6.0 Equipment

- Flexible bronchoscopy machine (Storz Aida)
- Flexible bronchoscope appropriate size (2.2 or 3.2)
- Blanket (for infant)
- Non-sterile gloves
- Oxygen (O²) saturations machine
- Oxygen saturations probe (age and weight appropriate)
- Apron x 2 (for doctor and nurse)
- Alco wipes x 1
- Suction machine
- Documentation book – for traceability / book
- Oxygen cylinder and ambubag (appropriate size)

7.0 Procedure

Action	Rationale
<ul style="list-style-type: none"> Check the emergency resuscitation equipment prior to commencing the ENT Clinic 	<ul style="list-style-type: none"> To ensure the procedure is completed smoothly (Dougherty and Lister 2015)
<ul style="list-style-type: none"> Turn on the flexible bronchoscopy machine 	<ul style="list-style-type: none"> To ensure the scope is working and that the procedure can continue
<ul style="list-style-type: none"> Verbal consent is obtained by the team prior to the procedure 	<ul style="list-style-type: none"> To inform the child / family; increasing co-operation and promote understanding and trust (Hockenberry and Wilson 2015, Dougherty and Lister 2015, Trigg and Mohammed 2010)
<ul style="list-style-type: none"> Explain to the child and parent / guardian what will occur and why the procedure needs to be performed 	<ul style="list-style-type: none"> To inform the child / family, increasing co-operation and promote understanding and trust (Hockenberry and Wilson 2015)
<ul style="list-style-type: none"> Ensure privacy for the child throughout the treatment 	<ul style="list-style-type: none"> To maintain dignity in accordance with the Prevention of abuse to children while in the care of the hospital (OLCHC 2013)
<ul style="list-style-type: none"> Decontaminate hands 	<ul style="list-style-type: none"> To reduce transfer of micro-organisms (HSE 2010, Infection Control Department 2013, Nurse Practice Committee 2013, OLCHC 2013)
<ul style="list-style-type: none"> Put on apron and gloves 	<ul style="list-style-type: none"> To protect personal clothing from occupation body fluid exposure (Infection Control Department 2010b)
<ul style="list-style-type: none"> Check the date and time the flexible bronchoscope was re-processed 	<ul style="list-style-type: none"> The flexible bronchoscope must have been re-processed within 3 hours of use or if stored in the extended storage endoscopic cabinet in OPD it must be reprocessed within 14 days
<ul style="list-style-type: none"> Prior to the procedure, wrap the infant in a blanket 	<ul style="list-style-type: none"> To maintain the infant in a safe and secure position
<ul style="list-style-type: none"> Position: <ul style="list-style-type: none"> The child in the procedure chair next to the flexible bronchoscopy machine independently for the procedure <p style="text-align: center;">Or</p> <ul style="list-style-type: none"> The infant / toddler in nurse / parent guardian's arms in a sitting position facing forward towards the doctor. The parent / guardian are positioned in the procedure chair next to the nasal endoscopy machine. 	<ul style="list-style-type: none"> To facilitate the smooth running of the procedure, ensure the patient is safe and facilitate observation of the patient during the procedure (Trigg and Mohammed 2010)
<ul style="list-style-type: none"> The patient may be attached to the O² saturations monitor, recording the child's baseline observations (heart rate and oxygen saturation level) prior to 	<ul style="list-style-type: none"> To obtain information via observation which will for a baseline for immediate action and ongoing assessment and assist in developing a plan of action

commencing the procedure and for the duration of the procedure.	(Trigg and Mohammed 2010) and to assist in the early detection and management of the complications associated with the flexible bronchoscopy procedure
<ul style="list-style-type: none"> The nurse positions a hand gently on the patient's head 	<ul style="list-style-type: none"> To prevent the patient moving their head during the procedure and causing damage to the respiratory passage during the procedure
<ul style="list-style-type: none"> Pre-meds; sucrose % if ordered by doctor for infants 0.2mls x 1; can be repeated x 2 times 	<ul style="list-style-type: none"> Oral sucrose acts as an analgesia and reduces infant distress (Stere'n's et al 2013)
<ul style="list-style-type: none"> The doctor carefully inserts the flexible bronchoscopy scope into the patient's nasal passage 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> Reassure the patient and parent / guardian throughout the procedure 	<ul style="list-style-type: none"> To help maintain a trusting relationship between the child and nurse (Hockenberry and Wilson 2010)
<ul style="list-style-type: none"> Once the doctor is finished examining the upper respiratory passages, s/he will gently remove the flexible bronchoscope 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> Post procedure observations may be performed as clinically indicated 	<ul style="list-style-type: none"> To monitor the patient's condition post procedure
<ul style="list-style-type: none"> If nasal spray or topical decongestant was used, the patient should fast for 20 minutes following the procedure 	<ul style="list-style-type: none"> Nasal spray or topical decongestant can cause a temporary sensation of not being able to swallow
<ul style="list-style-type: none"> Once the flexible bronchoscopy scope is removed from the patient's nasal passages, clean it with lint free cloth immediately after use. This cloth should be saturated with an instrument – cleaning, cleaner, disinfectant solution which has no protein fixing effect. The scope is then decontaminated in a room in St. Anne's Dressing Clinic by either the healthcare assistant or a nurses as per SOP <i>"Leak Test & Manual Cleaning of a Flexible Bronchoscope Post Procedure"</i> 	<ul style="list-style-type: none"> To avoid encrustation and clogging. In accordance with the SOP <i>"Leak Test & Manual Cleaning of a Flexible Bronchoscope Post Procedure"</i>
<ul style="list-style-type: none"> Dispose of all equipment appropriately 	<ul style="list-style-type: none"> To promote safety and prevent cross infection (OLCHC 2013, Department of Health & Children 2010)
<ul style="list-style-type: none"> Decontaminate hands as above 	<ul style="list-style-type: none"> To prevent cross infection (HSE 2010, Infection Control Department 2013, Nurse Practice Committee 2013, OLCHC 2011)
<ul style="list-style-type: none"> Evaluate and document the procedure in the patient medical notes. Place the nasal endoscopy traceability stickers (2 copies); one in the patient's medical notes and the other in the ENT Diary along with the patient's details, recording time and date of the procedure on both traceability stickers. 	<ul style="list-style-type: none"> To maintain accountability through accurate recording of nursing care (An Bord Altranais 2015)

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