



Local Safety Standard for Invasive Procedures: TRACHEOSTOMY INSERTION IN CONFIRMED COVID-19 (OVER 50kg)

INTRODUCTION AND RISK ASSESSMENT	PROCEDURAL PLANNING: WHO CHECKLIST	PROCEDURE, AFTERCARE & DOCUMENTATION
<p>STEP 1. TEAM MEMBERS INTRODUCE THEMSELVES</p> <ol style="list-style-type: none"> Senior anaesthetist _____ Second anaesthetist (if available) _____ Anaesthetic Nurse/ODP _____ Lead Surgeon _____ Surgical Assistant _____ Scrub Assistant _____ Positioning Assistant / Runner 1 _____ Runner 2: in corridor _____ <p>STEP 2. REVIEW ESSENTIAL IMAGING</p> <ol style="list-style-type: none"> Check latest CXR (how far to advance tube to <u>carina</u>) <input type="checkbox"/> Yes <input type="checkbox"/> No <u>Videolarngoscopy</u> (if concerns about <u>tracheitis</u>) <input type="checkbox"/> Yes <input type="checkbox"/> No <p>STEP 3. PATIENT SPECIFIC CONCERNS</p> <ol style="list-style-type: none"> Appropriateness of procedure confirmed <input type="checkbox"/> Yes <input type="checkbox"/> No Any known contraindications (eg High FiO₂, coag) <input type="checkbox"/> Yes <input type="checkbox"/> No Latest CXR reviewed (distance OETT tip to <u>carina</u>) <input type="checkbox"/> Yes <input type="checkbox"/> No Appropriate consent obtained <input type="checkbox"/> Yes <input type="checkbox"/> No Coagulation and medicines checked <input type="checkbox"/> Yes <input type="checkbox"/> No C-Spine precautions required <input type="checkbox"/> Yes <input type="checkbox"/> No Known Drug allergies recorded <input type="checkbox"/> Yes <input type="checkbox"/> No Difficult airway at intubation <input type="checkbox"/> Yes <input type="checkbox"/> No Enteral Feeding stopped and aspirated <input type="checkbox"/> Yes <input type="checkbox"/> No <p>Expected Level of Difficulty <input type="checkbox"/> Easy <input type="checkbox"/> Medium <input type="checkbox"/> Difficult Number of days post intubation _____</p> <p>STEP 4. ANAESTHETIC CONCERNS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anaesthetist familiar with procedure <input type="checkbox"/> Anaesthetic team familiar with ventilator <input type="checkbox"/> Can do low frequency, lower pressure, fixed volume mode <input type="checkbox"/> Can do end expiratory pause and tube clamp at tube change <input type="checkbox"/> Monitoring & lines <ul style="list-style-type: none"> <input type="checkbox"/> SPO₂ <input type="checkbox"/> EtCO₂ <input type="checkbox"/> ECG <input type="checkbox"/> BIS <input type="checkbox"/> <u>Arterial</u> Line <input type="checkbox"/> CVP <input type="checkbox"/> IV access <input type="checkbox"/> TPN feed <input type="checkbox"/> Medications drawn up <ul style="list-style-type: none"> <input type="checkbox"/> Infusions <input type="checkbox"/> Boluses <p>If required: <input type="checkbox"/> Antibiotics (Micro <u>guided</u>) <input type="checkbox"/> Tranexamic Acid</p> <p>STEP 5. SURGICAL CONCERNS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Surgical assistant familiar with procedure <input type="checkbox"/> Scrub assistant familiar with procedure <input type="checkbox"/> Positioning assistant familiar with procedure 	<p>STEP 6A. EQUIPMENT REQUIREMENTS</p> <ol style="list-style-type: none"> Head extension / hand table, cable ties, tape Head ring, PatSlide, sliding sheet, shoulder roll, Head light Surgical instruments: tracheostomy set, dilators Surgical suction Diathermy: Monopolar & Bipolar Sutures: 4/0 <u>vicryl</u> ties, 3/0 round body <u>vicryl</u>, 2/0 silk Local anaesthetic and skin preparation Tracheostomy tube x3 with inner tubes and subglottic port Anaesthetic reintubation equipment Tube clamp and cuff inflation syringes New HMEF, catheter mount with <u>branch</u> port and in-line suction <p>STEP 6B. TALK THROUGH CRITICAL STEPS</p> <ol style="list-style-type: none"> PPE donning and check Positioning: Bed height, patient, equipment, personnel ITU mattress working and set to maximum pressure Anaesthetic Preparation: (Drugs, paralysis, Fio2 100%, Antibiotics) <u>Videolarngoscopy</u> and <u>Oropharyngeal</u> suction (Yankauer) Inline suction through OETT and subglottic port of OETT tube Skin prep and drape, Local anaesthesia and marking Standard surgical approach and haemostasis Preparation of trachea (without perforation) Tracheostomy tube check Change ventilation: low frequency, lower pressure, fixed volume Advance OETT tube below planned tracheal window Tube Exchange Timeout by lead surgeon Tracheal window excised 2/0 silk rescue suture placed End expiratory pause, stop ventilating and OETT clamped Back out OETT to above tracheal window Insert <u>trachy</u> tube, remove introducer and insert inner tube Inflate cuff and check cuff pressure / seal Recommence ventilation and ensure EtCO2 Secure tube Carefully doffing and disposal of PPE <p>STEP 6C. INFECTION CONTROL ISSUES: DONN PPE WITH BUDDY PPE: FFP3 mask/ hood + visor + hat + long sleeve surgical gown + double glove (PLEASE REFER TO CURRENT PHE GUIDANCE)</p> <p>STEP 6D. FINAL CHECK</p> <ol style="list-style-type: none"> Correct patient <input type="checkbox"/> Yes <input type="checkbox"/> No Any new concerns <input type="checkbox"/> Yes <input type="checkbox"/> No 	<p>STEP 7. TUBE EXCHANGE TIMEOUT</p> <p>To Scrub Assistant</p> <ol style="list-style-type: none"> <u>Unfenestrated trachy</u> with closed subglottic suction port <input type="checkbox"/> Yes <input type="checkbox"/> No <u>Trachy</u> size and cuff patency checked, syringe loaded <input type="checkbox"/> Yes <input type="checkbox"/> No Inner tube and Alternate sizes to hand <input type="checkbox"/> Yes <input type="checkbox"/> No Suction available <input type="checkbox"/> Yes <input type="checkbox"/> No 2/0 silk tracheal ring suture loaded <input type="checkbox"/> Yes <input type="checkbox"/> No Bowl of saline available (airway <u>fire</u>) <input type="checkbox"/> Yes <input type="checkbox"/> No <p>To Anaesthetist</p> <ol style="list-style-type: none"> In line suction performed through subglottic OETT <input type="checkbox"/> Yes <input type="checkbox"/> No OETT advanced distal to planned tracheal window <input type="checkbox"/> Yes <input type="checkbox"/> No Cuff inflated with no obvious air leak <input type="checkbox"/> Yes <input type="checkbox"/> No Low frequency lower pressure ventilation confirmed <input type="checkbox"/> Yes <input type="checkbox"/> No Ready to stop ventilating when required <input type="checkbox"/> Yes <input type="checkbox"/> No <p>STEP 8. TUBE EXCHANGE</p> <ol style="list-style-type: none"> Tracheal window excised <input type="checkbox"/> Yes <input type="checkbox"/> No 2.0 silk tracheal ring suture placed and clipped <input type="checkbox"/> Yes <input type="checkbox"/> No End expiratory pause, stop ventilating, OETT clamped <input type="checkbox"/> Yes <input type="checkbox"/> No Confirm intratracheal pressure is atmospheric <input type="checkbox"/> Yes <input type="checkbox"/> No OETT cuff deflated and tube withdrawn to cricoid <input type="checkbox"/> Yes <input type="checkbox"/> No Suction only if absolutely necessary <input type="checkbox"/> Yes <input type="checkbox"/> No Tracheostomy tube placed under direct vision <input type="checkbox"/> Yes <input type="checkbox"/> No Remove introducer and insert inner cannula <input type="checkbox"/> Yes <input type="checkbox"/> No Lead surgeon holds tube in position <input type="checkbox"/> Yes <input type="checkbox"/> No Cuff inflated and pressure holding <input type="checkbox"/> Yes <input type="checkbox"/> No Connect closed ventilation circuit, filters & <u>branch</u> port <input type="checkbox"/> Yes <input type="checkbox"/> No Re-establish ventilation <input type="checkbox"/> Yes <input type="checkbox"/> No EtCO₂ confirmed <input type="checkbox"/> Yes <input type="checkbox"/> No Bilateral air entry observed <input type="checkbox"/> Yes <input type="checkbox"/> No Tie tracheal ring suture loosely, tape and label "<u>RESCUE</u>" <input type="checkbox"/> Yes <input type="checkbox"/> No Secure <u>trachy</u> tube (sutures and <u>tapes</u>) <input type="checkbox"/> Yes <input type="checkbox"/> No <p>STEP 9. DOCUMENTATION</p> <ol style="list-style-type: none"> Anterior Jugulars <input type="checkbox"/> Avoided <input type="checkbox"/> Diathermy <input type="checkbox"/> Tied Strap muscles <input type="checkbox"/> Retracted <input type="checkbox"/> Divided Thyroid <input type="checkbox"/> Avoided <input type="checkbox"/> Diathermy <input type="checkbox"/> Tied Window excised <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> 4th Rescue suture placed <input type="checkbox"/> Yes <input type="checkbox"/> No Adequate cuff seal <input type="checkbox"/> Yes <input type="checkbox"/> No <p>STEP 10. EDUCATION RESOURCES</p> <ul style="list-style-type: none"> <input type="checkbox"/> Difficult airway society tracheostomy care guidelines left with patient