Academic Department of Critical Care
Queen Alexandra Hospital Portsmouth

Tracheostomy Care in Critical Care

Aim To provide guidance on the insertion, daily care , and emergency management of tracheostomies in Critical Care
Scope All adult patients in Critical Care with a tracheostomy

Tracheostomy Insertion Checklist

Check 1: Preparation		
T	Team (all introduced)	Airway Airway assistant Operator Operator assistant/runner
R	Reason Risks Resources	Consider reason for insertion Consider risks if high PEEP/FiO_2, difficult anatomy, C-spine concerns Ensure all appropriate equipment present and checked
A	Airway plan Anaesthetic plan Aspirate	Difficult airway trolley and bronchoscope present/checked Airway management plan discussed Respiratory monitoring (including capnography) present Ventilator settings checked Patient adequately sedated and paralysed Aspirate NGT (stop insulin if running)
C	Choice of tube Consent	Consider patients BMI – is an adjustable flange tube needed? Check cuff Ensure form 4 completed
H	Haemodynamics Haemorrhage	Ensure full monitoring in place Ensure clotting checked and heparin stopped/omitted
E	Expose and position the patient properly	Is a percutaneous tracheostomy still possible? Consider ultrasound

Check 2: Just prior to starting procedure
Right patient
Right staff present
Right equipment (including tracheostomy tube)
Right time to be doing the procedure
Right method (surgical vs percutaneous)

Is everyone present ready to proceed?	
Yes	**No**

Check 3: Post procedure	
Confirm tube is in airway	End tidal CO_2 (value and waveform) Chest wall movement with ventilation Direct vision with bronchoscope
Check position of tip tube in relation to carina	Tip should be 2-5cm from the carina
Ensure inner tube in place	
Check cuff pressure	15-25cm H_20
Secure tracheostomy	Dressing and ties
Ventilator settings/patient sedation	Review post procedure
Documentation	Complete CIS note, CXR if clinically indicated Handover to bedside nurse

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Choice of tracheostomy tube

Insertion *(insertion kits)*

Small body size

(e.g. petite elderly female)

Tracoe Twist Plus subglottic aspiration

Size 7

Default

Tracoe Twist Plus subglottic aspiration

Size 8 or 9

Large body size

Uniperc adjustable flange

Size 7 or 8

Subsequent changes on ICU

Small body size

(e.g. petite elderly female)

Tracoe Twist Plus subglottic aspiration

Size 7

Default

Tracoe Twist Plus subglottic aspiration

Size 8 or 9

Large body size

Uniperc adjustable flange

Size 7 or 8

Discharge to the ward

Note: NO SUBGLOTTIC ASPIRATION TUBES TO BE SENT TO THE WARD

Small body size

(e.g. petite elderly female)

Tracoe Twist Standard

Size 6 or Tracoe Twist Plus Size 7

Default

Tracoe Twist Plus

Non subglottic aspiration

Size 6, 7 or 8

Large body size

Uniperc adjustable flange

Size 7 or 8

CONSIDER WHETHER ADJUSTABLE FLANGE STILL NEEDED

Tracheostomy daily care

Oxygen therapy & humidification	• Ensure adequate humidification delivered (ventilated **and** non ventilated patients)
Inner cannula	• Inner cannula should be removed, inspected & cleaned **every 4 hours** ***(see note in text)*** • Spare inner cannula to be kept at bedside • Dirty cannula cleaned with sterile water & left to air dry
Secretions and suctioning	• Deep suctioning should be performed as often as clinically indicated but minimum **every 4 hours** if fully ventilated • Secretions can be suctioned from tracheostomy opening using Yankeur sucker if using trache mask
Stoma care & securing the tracheostomy	• **Minimum of once per 24 hours**: • Inspect stoma site for infection • Clean stoma with sterile gauze & saline/water • Change dressing and ensure tapes secure
Cuff check	• Check cuff pressure a **minimum of once per shift** • Cuff pressure should be below 20-25cmH_2O *(bottom of green on the manometer)* • Check more frequently as indicated
Oral care & assessment of swallowing	• Daily oral care (see DCCQ Mouth care SOP) • Regular assessment of swallowing
Documentation	• All tracheostomy observations should be documented on CIS
Safety	• Ensure continuous capnography in place • Ensure bedhead sign in place • Be familiar with tracheostomy red flags and emergency algorithms

For further details please refer to full text and educational resources