Worcestershire Acute Hospitals NHS Trust

MANAGEMENT OF PATIENTS WITH TRACHEOSTOMY TUBES

Key Document code:	WAHT-KD-022
Approved by:	Intensive Care Forum
Date of Approval:	14th October 2024
Date of review: **This is the most current document and is to be used until a revised version is available**	14th October 2027

Key Amendments

Date	Amendment	Approved by
8th April 2019	Notes for Alexandra Hospital Wards	ICM Forum
14th October 2019	New reference added and designated admission areas	ICM Forum
July 2021	Document review date amended as per the Key Documents policy 3 year approval update.	Trust policy
September 2022	Document re-approved for 3 years.	ICM Forum
October 2024	Updated – Clarification of wards accepting, New references, formatting, MDT roles, tube types	ICM Forum

Designated admission areas

In order for patients with Tracheostomy or Laryngectomy to be managed safely it has been agreed by a multidisciplinary team that they should be nursed in clinical areas where nurses and doctors have appropriate skill and knowledge to manage them (NCEPOD 2014)

In this Trust the designated areas are WRH: **ICU**
Head and Neck for surgical patients
ARU for Respiratory/Medical patients

Alexandra**:** **ICU**
Ward 5

Transfer to these areas from our emergency departments should be in a timely manner. All patients admitted to the trust should be highlighted to the Altered Airways MDT via outreach.

Please note: All patients with cuffed tracheostomy tubes requiring the cuff to be inflated at any time should only be managed in the following areas:

- **WRH**: only on ICU or Head and Neck ward.
- **Alexandra**: only on ICU or ward 5.

All patients should have within their bedspace, Bedhead sign, emergency box containing listed equipment. (These can be obtained from outreach, ICU or Head & Neck ward at WRH and outreach or ICU at Redditch)

Supporting Guidelines:

- WAHT Tracheostomy Guidelines
- Adult Altered Airway Patients – Discharge Guideline

Supporting Documentation:

- Adult Tracheostomy Pathway
- Altered Airways Discharge Pathway (AADP) - print off and fill in appendices/forms appropriately
- Adult Tracheostomy Patient/Carer Information/Assessment booklet
- Staff Tracheostomy competency and self-directed learning package

Introduction/Background:

A Tracheostomy is the creation of an opening into the trachea via the neck, with the insertion of an indwelling tube. [Balliere, 1989]. It is placed in the trachea just below the 2nd or 3rd tracheal rings, below the level of the vocal cords, thus rendering the patient temporarily without a voice.

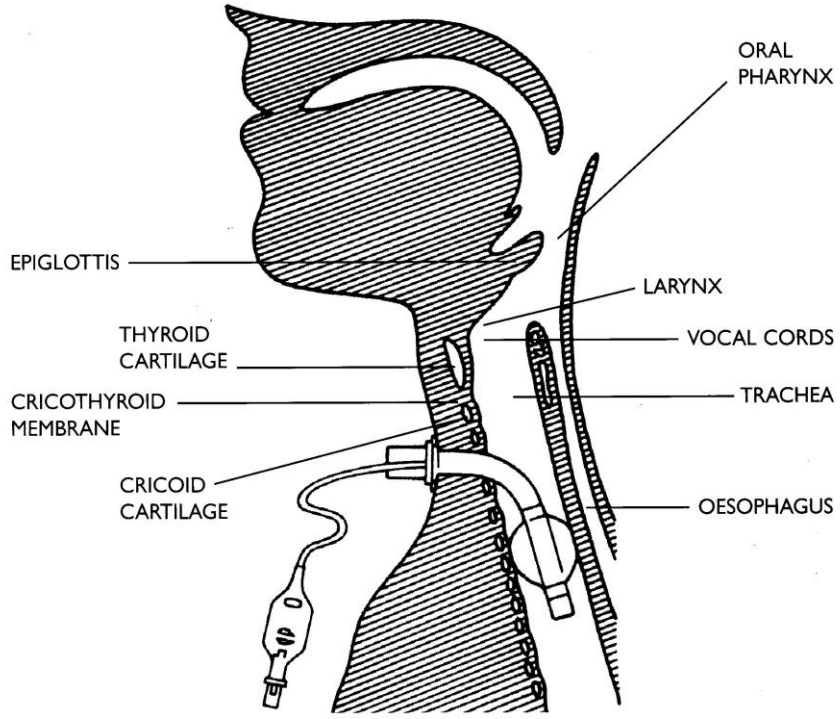

Figure 3: The Anatomical Position of a Cuffed Tracheostomy Tube.

Types of Tubes

All are made of non-irritant material, curved; approximately 4 inches long and have a flange for the attachment of tapes/tube holder enabling the tube to be secured.

- Single lumen (cuffed or uncuffed)
- Double lumen tubes with inner cannulas (cuffed or uncuffed)
- Fenestrated, (cuffed or uncuffed)
- Adjustable flange
- Tubes with sub glottic suction port

How a Tracheostomy Is Formed

Cricothyroidotomy – an opening is made into the cricothyroid membrane and a temporary tube is inserted in an emergency or a minitracheostomy tube (single uncuffed lumen) in a planned procedure.

- Not suitable for conventional ventilation
- Not suitable for patients with no gag or cough reflex
- Is often used as a weaning measure
- Good access for suctioning
- Ideal in patients who are breathing but where sputum retention is a problem

Surgical Tracheostomy - performed in theatre, an incision is normally made between the 2nd and 3rd tracheal rings. The muscle is divided and the tracheal cartilage is cut and often a small piece is removed to make way for the formal tube. A cuffed, fenestrated or unfenestrated tube is used.

- Suitable for all types of patient
- Maintains a patent airway
- Facilitates the delivery of conventional ventilation

Percutaneous Tracheostomy - may be performed in the Intensive Care Unit. A small incision is made in the patient's neck and a guide wire is inserted into the trachea under fibre optic guidance. The incision site is dilated up to a diameter that will allow a tube to be inserted over the guide wire. Doctor requires training in the technique.

- Less traumatic procedure
- No theatre time and avoids moving the patient.
- Fewer complications

Indications for a Tracheostomy

- To bypass an obstruction in the upper airway
- To optimise weaning by reducing the requirement for sedation required to facilitate tolerance of an endotracheal tube
- To facilitate weaning by permitting intermittent periods of discontinuation of mechanical ventilatory support
- To optimise access for tracheal suction

Complications of Tracheostomy Insertion

Immediate:

- Haemorrhage
- Surgical emphysema
- Pneumothorax
- Accidental disconnection from ventilator
- Acute loss of airway patency
- Cricoid cartilage damage

Delayed:

- Blockage with secretions
- Infection – pulmonary or stoma
- Tracheal stenosis
- Ulceration of trachea
- Sinus development
- Airway obstruction
- Tapes/holder too tight
- Mucosal ischaemia caused by over inflated cuff
- Poor stoma closure

Current Tracheostomy Tubes in use at WAHT:

- Standard inpatient use: Portex, 'Blue line ultra' - double lumen, cuffed/uncuffed, fenestrated/unfenestrated, with/without subglottic suction port. Sizes 6, 7.5, 8.5
- Alternative inpatient use: Portex – 'uni perc' – adjustable flange, double lumen, cuffed. Size 6, 7, 8
- Standard long-term use: 'Tracheo twist' - double lumen, cuffed/uncuffed, fenestrated/unfenestrated, with/without subglottic suction port. Sizes 6, 7, 8

- Other specialist tubes are available if required.

Competencies and training required

A Qualified Nurse/Physiotherapist who has undergone appropriate training using the Tracheostomy Competency Package along with WAHT self-learning package theory and practical. Attendance at the Trust-wide Biannual Altered Airways Training/Simulation day is encouraged.

Patients Covered

Any patient in any area with a tracheal tube.

DETAILS OF GUIDELINE

Care of the Patient with a Tracheostomy

1. Maintaining the airway
2. Tracheal suctioning/subglottic aspiration
3. Care of the stoma
4. Removal of the tracheostomy tube
5. What to do if things go wrong
6. Altered Airway MDT
7. Psychological support and education
8. Speech and Swallowing
9. Physiotherapy, Weaning and Rehabilitation
10. Critical Care Outreach Team
11. Discharge Planning

These will be described in more detail and specific procedures for care will be highlighted. All care must be documented in the Tracheostomy Care Pathway.

1. Maintaining the Airway:

Tube holder/Tracheostomy tapes:
The tracheostomy tube must be secured with tapes to ensure that the airway is maintained.

Movement can result in:

- Traumatic extubation
- Displacement of the tube
- Loss of cuff seal
- Oesophageal intubation
- Patient discomfort

The tapes should be checked minimum of once per shift to ensure that it is clean and effectively secured. It should be changed if visibly soiled. This should be recorded on the Tracheostomy Observation Chart.

Changing tracheostomy tapes should involve two trained staff, as there is a risk of decannulation. Both staff members should decontaminate their hands by performing hand hygiene and apply gloves and aprons. The assistant should maintain the security of the tube whilst the other person carries out the procedure.

Securing with Tracheostomy Holder. The holder is positioned around the patient's neck with the soft side to the patient. The attachment pieces are threaded through the flanges on the tube and folded back to connect with the Velcro.
The tube holder should be attached tight enough to keep the tracheostomy tube firmly in place but loose enough to allow two fingers to fit between them and the patient. This will help to minimise the risk of reduced cerebral blood flow from the carotid arteries due to external pressure.

Cuff Pressure Measurements:

Increased pressure inside the cuff may cause damage to the tracheal mucosa reducing the perfusion, which itself may lead to tracheal damage. [McGrath 2014] However, if the cuff is not adequately inflated it will allow the tube to move in the trachea causing erosion, ulceration and loss of airway patency.
The cuff pressure must be measured and recorded a minimum of once per shift on the Tracheostomy Observation Chart.

The tracheostomy cuff may be considered for deflation but this decision needs to be made by the attending physician or competent health practitioner (see Removal of the Tube)
A hand pressure manometer is used to check the pressure in the cuff and indicates the pressure exerted by the cuff on the tracheal wall. Pressure should not exceed 25cm H20.

Safety Equipment:

Within the patient's bed space there should be certain equipment readily available when caring for a patient with a tracheostomy tube (Wilkinson et al 2014):

- Oxygen supply and appropriate delivery system, e.g. tracheostomy mask
- Humidification and nebulising device/equipment
- Suction unit and appropriate sized suction catheters
- Patient sign indicating Altered Airway – green
- Tracheostomy Box (contents Appendix 3) - this will accompany the patient wherever they are within the hospital.
- Ambubag and mask, Hyperinflation bag (Waters circuit) (Mapelson C Circuit)-These should be within ward area normally located on Resuscitation trolley.

This equipment should be checked at least once per shift and documented on the Tracheostomy Observation Chart.

Humidification:

As the tracheostomy tube bypasses the body's own humidification and filtering system, some form of humidification must always be provided to prevent the patient's secretions from becoming dry and crusty. The type of humidification device used will be dictated by the needs of the patient at that current time. (McGrath 2014)

The humidification ladder should be considered in order

- A Buchanan bib is a foam bib that lies around the neck protecting and humidifying the area in front of the tube by trapping and recycling the patients expired moisture.
- A Swedish nose is a small connector that fits onto the tube and may be appropriate as long as the patient is well hydrated and the secretions are minimal. A clip on device can be used in conjunction with this device to deliver oxygen.
- Nebulised saline should be considered for all patients on a regular or PRN basis to reduce the viscosity of secretions, and as an adjuvant treatment and must be prescribed.

- If Oxygen is required should always be humidified using elephant tubing attached to a tracheostomy mask, may be used alone or in conjunction with a warming element, i.e. an aquapak motor.
- It should be noted here that systemic hydration is paramount, as no amount of humidification will assist a dehydrated patient whose mucous membranes will be drier, reducing mucocillia transport causing retention of secretions.

The humidification device should be recorded on the Tracheostomy Observation Chart.

Inner Cannula Tube Maintenance:

Double lumen tracheostomy tubes have an inner tube that can be either removed and cleaned if reusable or replaced if disposable. Secretions can stick to the internal lumen of a tracheostomy tube and greatly reduce the inner lumen diameter, increasing the work of breathing and may, in severe cases block the airway altogether therefore a tracheostomy with an inner cannula has the advantage that it can be changed frequently which reduces the risk of occlusion.

The inner tube must be replaced or cleaned and replaced a minimum of once per shift depending on the secretions and recorded on the Tracheostomy Observation Chart.

Procedure for Changing an Inner Cannula:

Establish whether the inner cannula is reusable or disposable.
Equipment required:
New tracheostomy inner cannula
Gloves and apron

Method:

- Prepare the patient and explain the procedure. Sit the patient up and perform tracheal suction if necessary.
- Wash hands and don PPE and assemble and prepare equipment on a trolley.
- Wearing the gloves grip the ring pull of the inner cannula or twist as per tube mechanism and steady the tube with baseplate as you pull the inner cannula out. Discard or set aside for cleaning.
- Insert the new cannula and lock into position whilst securing the tube.
- Ensure the patient's comfort and safety
- Remove PPE and decontaminate hands by performing hand hygiene.
- Document procedure in the patient's notes and on tracheostomy observation chart.

Procedure for Cleaning a Reusable non sterile Inner Cannula:

Within WAHT there are double lumen tubes with reusable inner cannulas and disposable, please check individual tube if unsure. Patients should always have two appropriate sized inner cannulas.
Equipment required:
Sterile dressing pack
Syringe
Receiver/cup
Sterile water
Tube cleaning swabs
Plastic storage pot with lid and patient label
Gloves and an apron must be worn

Method:

- Prepare the patient and explain the procedure. Apply PPE and perform hand hygiene, sit the patient up and perform tracheal suction if necessary.
- Assemble equipment on the trolley.
- Remove inner cannula, Insert the clean spare inner cannula.
- Clean inner cannula using tube cleaning brush and gauze into receiver/cup until all secretions are cleared and no visible soiling on the cannula, inspect it for any damage.
- Rinse the tube in sterile water and using gauze swab to ensure it is dry and clean.
- Store spare inner cannula in a labelled pot with lid.
- Remove PPE and decontaminate hands by performing hand hygiene
- Ensure the patient's comfort and safety and document on tracheostomy observation chart.

2. Tracheal Suctioning:

Tracheal suction should not be carried out routinely at set times, but only after careful assessment of the patient. Suctioning aims to remove secretions from the airway should the patient be unable to clear them themselves.

Indications for Suction include:

- Visible or audible secretions
- To maintain the patency and integrity of the airway.
- Increased coughing
- A decrease in O2 saturations.
- Course / absent breath sounds on auscultation

Precautions for Suction include:

- Stridor
- Derranged clotting
- Pulmonary odema
- Bronchospasm
- Tracheoesophageal fistula.
- High bronchial Ca.

Complications of tracheal suctioning are:

- Hypoxia
- Cardiovascular instability
- Atelectasis
- Mucosal damage
- Bronchospasm
- Introduction of infection
- Raised intracranial pressure
- Vomiting
- Increased patient anxiety.

The lowest effective vacuum pressure should be used when suctioning to reduce the complications.

Recommended suction pressure for adults

13.5-20 Kpa or 80-120mmHg [Glass and Grap, 1995]

The appropriate suction catheter should always be used according to the size of the tracheal tube. Use the smallest diameter catheter necessary to clear secretions.

Procedure for Tracheal Suctioning:

Equipment required:

- Suction unit (wall mounted or portable)
- Suction tubing
- Sterile suction catheters
- Sterile disposable gloves
- Oxygen therapy
- Yankauer suction catheter
- Sterile water
- Apron, gloves

Method:

- Perform hand hygiene and don PPE
- Explanation of procedure given/consent gained, prepare patient and necessary equipment ensuring correct size suction catheter selected..
- Monitor Sp02, pre oxygenate if patient likely to desaturate, nebulise prior to suction to help loosen any thick secretions.
- Test suction pressure.
- **Yankeur suction**: apply only around stoma and to catch secretions patient is spontaeneously coughing from tube, do not place yankeur inside tracheostomy tube.
- **Deep Suction**: wearing sterile glove over clean glove remove suction catheter from packet and pass down the tracheostomy until meeting resistance or patient coughs. Apply suction and withdraw catheter in continuous motion over maximum period of 15 seconds only applying suction on withdrawal.
- Wrap catheter around hand and remove glove keeping catheter within it then dispose of in clinical waste.
- Clear any secretions around the tube/stoma with yankeur suction or tissue if required.
- Repeat procedure until secretions are cleared and patient breathing comfortably, allowing time to settle in between suctions.
- Document the procedure on the patient's Tracheostomy Observation Chart.

Procedure for Subglottic Aspiration:

Tracheostomy tubes with above cuff subglottic ports are regularly used within WAHT, for patients who are ventilated to reduce risk of ventilator acquired pneumonia and for ward based patient with a high secretion load and at risk of aspiration, when clinically indicated.

- The port should be aspirated using a 10ml syringe every 1-2 hours (depending on the quantity of secretions)
- The port must be aspirated prior to letting the cuff down and before any significant repositioning events.
- If the aspiration port appears blocked or secretions are too thick to aspirate, up to a maximum of 5mls 0.9% Normal Saline may be injected via the port to test patency or clear the port prior to further aspiration attempts.

3. Care of the Stoma:

A tracheostomy stoma is a surgical wound and should be treated as such to maintain patient comfort, promote healing and reduce the risk of infection. The tracheostomy may be sutured in place and these will be removed after clinical assessment.
Secretions collected above the tracheostomy cuff may ooze from around the stoma site. The wetness that results can promote irritation of the skin and can lead to soreness. It may also act as a medium for bacterial growth or prevent the stoma from healing. A tracheostomy dressing should be in place.
The dressing should be checked a minimum of once per shift to ensure that it is clean and dry.

At least once per day or more frequently if necessary, the dressing should be changed and this should then be recorded on the Tracheostomy Observation Chart.

Clean technique must be employed and the following procedure followed:

Two trained members of staff are required to perform due to the risk of decannulation.

Procedure for the Care of the Stoma:

Equipment needed:
Sterile dressing pack
Sterile Tracheostomy Dressing
Gloves and apron

Method:
- Prepare the patient and explain the procedure. Don PPE and decontaminate hands by performing hand hygiene
- Sit the patient up and perform tracheal suctioning if necessary.
- Ask the patient to slightly extend their neck as this allows easier access to the stoma site.
- The assisting nurse applies gloves and maintains the security of the tube throughout the procedure.
- Wash hands and assemble equipment on a trolley, opening the normal saline and dressing onto the sterile field.
- Remove soiled dressing and discard.
- Assess the stoma site. If red, inflamed or signs of infection present, take a swab and send for M, C and S.
- Clean area with normal saline and dry with gauze.
- If the skin around the stoma site appears sore a barrier cream may be applied.
- Apply clean dressing and ensure patient's comfort.
- Remove PPE and decontaminate hands by performing hand hygiene
- Document procedure in the patient's notes or care plan.

4. Removal of the Tube/Decannulation:

A multidisciplinary decision will have been made and documented in the Tracheostomy Care Pathway regarding the plan for removal of the tube. In certain circumstances it may not be appropriate for the tube to be removed at all. In some situations it may be necessary to downsize the tube.
If the plan is to remove the tube then the decannulation guideline may be applied once the patient fits the criteria suggested in the Tracheostomy Care Pathway.
Removal of the tube is only appropriate when the patient has the ability to maintain their own airway and expectorate secretions without the need for tracheal suctioning.
Patients' needs to be assessed individually by the parent team with consultation of the multidisciplinary team involved in their care.
There should be adequate staff on duty to closely observe the patient for the first 24 hours.
The patient should be fully informed and aware of the intended procedure and help should be readily available if the patient becomes distressed.

Timing of the decannulation should be optimal; when the patient is rested early in the day is preferable, ideally Monday to Friday between 9am and 3pm.
Two trained health Care Professionals are required for these procedures who have undertaken the necessary competency in the Tracheostomy Competency Package.

Procedure for removing the tracheostomy tube:

Equipment required:
Tracheostomy Box
Sterile dry dressing
Occlusive film dressing
10 ml syringe
Gloves and apron

Method:

- Completed weaning process and patient deemed ready for decannulation. Explanation of procedure, prepare necessary equipment, two trained healthcare professionals present.
- Tracheostomy emergency box at bedside.
- Perform tracheal suctioning, encourage patient to cough out any excess secretions.
- Monitor Sp02, check cuff is fully deflated (if applicable).
- Slightly extend neck to improve access, assisting healthcare professional holds onto tracheostomy tube whilst other removes dressing and tapes, disposed of in clinical waste bag.
- Advise patient to breathe in and on expiration remove tracheostomy by pulling on it firmly, clear away any excess secretions and cover stoma with gauze to assess whether patient can breathe via upper airway with no reduction in Sp02.
- Assess stoma site and clean with saline, cover with occlusive dry dressing, and button for patient to locate pressure point. Show patient how to apply pressure when coughing and talking.
- Maintain regular observations to ensure no distress/discomfort post decannulation.

Following decannulation the tracheostomy box should be kept at the bedside for 24 hours.

Elective Changing or downsizing of a Tracheostomy Tube:
The decision to change any tracheostomy tube must be made by the attending consultant or an MDT decision. This should only be undertaken by a practitioner with the appropriate competency.
Double lumen tubes tubes as per manufacturers guidelines should be changed at 4 weekly intervals, unless otherwise indicated for medical reasons or by MDT.
The tracheostomy tube may require changing earlier as indicated by the patients condition or needs

Recannulation within 7 days should only be undertaken by trained Medical staff using fibre optic scope. This should include the use of capnography to ensure correct placement.

5. What to do if things go wrong:

Emergency tracheostomy management algorithm is available on the reverse of the patients bedhead tracheostomy sign

Careful monitoring of the tracheostomy patient will result in the identification of problems at an early stage. A respiratory assessment of the patient should be undertaken observing the patient for signs of distress, use of observations National Early Warning Scores (NEWS2).

Signs of Respiratory Distress

- Laboured breathing
- Sweating
- Increased respiratory rate
- Increased blood pressure
- Use of accessory muscles
- Anxiety
- Fall in pulse oximetry readings
- Cyanosis [Cox and McGrath, 1999]

If the patient is in distress:
Follow the tracheostomy algorithm.

If the tracheostomy tube appears blocked

- Call for urgent help 2222
- Reassure the patient
- Apply oxygen via facemask and tracheostomy
- Remove inner cannula
- Suction via tracheostomy
- Let down the cuff (if present)
- If necessary remove the tube if still blocked
- Insert tracheal dilators to maintain stoma and airway closely until medical emergency team arrives

If the tracheostomy tube falls out or has to be removed due to blockage

- Call for urgent help 2222
- Reassure the patient
- Apply oxygen via facemask and tracheostomy
- Insert the tracheal dilators to maintain the stoma and airway
- Monitor patient closely until medical emergency team arrives

Who to call for help:
If routine query, then contact outreach or ENT or Altered Airways MDT.

If distressed or rapidly deteriorating patient then MET call 2222.

6. The Altered Airways MDT Team:

The Altered Airways MDT consists of Outreach, Head & Neck CNS, Head and Neck Physio and SLT along with support from the ENT consultants. They are considered an essential team to ensure the holistic care of AA patients (Bonvento et al (2017).
They are available and can be contacted Monday-Friday for support, education and in managing any altered airways patients admitted to the trust.

7. Psychological Support and Education:

The psychological status of the patient must be considered by the nurse as they may be unable to speak to identify their fears and needs. [Albarran, 1991]
Alternative methods of communication must be employed, for example a pen and paper or Communication charts and a patient call bell must always be readily available.
If the patient has been transferred from a Critical Care Area they may well be sleep deprived and disorientated. It is vital that the nurse spends time with the patient explaining about the tracheostomy itself, the reason for its insertion and the subsequent care that will follow.
The patient may need reassurance and teaching about coughing, deep breathing and oxygen therapy.

Ideally the patient should be nursed in a main ward area where nursing staff can be available and easily summoned by the patient or relatives. The patient's relatives may also need support and education regarding the tracheostomy and its care. They may wish to assist in their relatives care and this should be encouraged as with any other nursing care as it enables the relatives and the patient to feel more involved in the recovery process.
Discharge documentation should be used in preparation.

8. Speech and Swallowing:

Speech and Language Therapists (SLT) are involved in the assessment and management of tracheostomised patients who present with swallowing or specific communication difficulties. An assessment of swallowing function by an SLT is required prior to the commencement of oral feeding in patients, identified as being at risk of dysphagia. This is to reduce the risk of aspiration, which may lead to aspiration pneumonia. A multi-disciplinary approach is recommended to ensure appropriate and effective care for the individual patient.
If the complex interrelation between swallowing and respiration is disrupted, significant impairment can result. Additionally, due to the shared functions of the hypopharynx and the larynx, the impact of dysphagia is often heightened in the individual with respiratory compromise. (St Georges Healthcare NHS Trust 2012)

When to consider a referral to the Speech and Language Therapy Department for a swallowing assessment:

Referral would be appropriate for tracheotomised patients with:

- Neurological involvement – bulbar
- Head and Neck surgery

- Evidence of aspiration of food/fluid/oral secretions on tracheal suctioning
- Persistent wet or weak voice when cuff is deflated and speaking valve or decannulation cap in place
- Coughing in relation to oral intake
- Patient anxiety or distress during oral intake

SLTs are able to assess swallowing at bedside or using instrumental assessment such as Fibreoptic Endoscopic Evaluation of Swallowing (FEES) and Video fluoroscopy.
FEES allow direct visualisation of pharyngeal and laryngeal anatomy and physiology before, partially during and after the swallow.
Video fluoroscopy enables radiographic visualisation of the swallow, the triggering of the pharyngeal swallow in relation to the bolus and the motor aspects of the pharyngeal swallow. Video fluoroscopy is available for patients who are appropriate to be assessed in the radiology department.

SLT's can also assess and facilitate communication using non-verbal and verbal communication methods as well as manipulation of the tracheostomy tube to facilitate the voice. Referral to the SLT can be made by telephone via switchboard

9. Physiotherapy, Chest Clearance, Weaning and Rehabilitation:

The physiotherapist will also visit the patient regularly and is a great source of reassurance and education to the patient and relatives. Respiratory physiotherapists are independent practitioners with skills in assessment and treatment of respiratory problems. Chest clearance is a core function of physiotherapists and is a key part of the management of tracheostomy patients whose ability to humidify, cough and swallow chest secretions may be significantly impaired or absent. Airway clearance techniques positioning and suctioning secretions through the tracheostomy can remove or retrieve pulmonary secretions from the proximal airways and improve V/Q matching (Bonvento et al (2017).

Physiotherapists can advise on the use of pharmacological therapies in mobilizing secretions to aid expectoration. E.g. nebulized drugs such as isotonic 0.9% saline solution through to higher concentration hypertonic saline, or mucolytics.

The physiotherapist plays a key role in the physical rehabilitation of patients with a Tracheostomy. Patients on ICU, post ICU and ward-based patients with Tracheostomy are more at risk of the possible consequences of longer-term mechanical ventilation, prolonged bed rest or inactivity, muscle wasting, weakness and general deconditioning, leading to Hospital Acquired Functional Decline. Early mobilisation is an effective and safe strategy to improve functional mobility outcomes, but also it is beneficial for cognitive and respiratory well-being (NICE, 2009).

Physiotherapists play a key role within the MDT in assessing the suitability tracheostomy weaning and decannulation, through assessment of oral and pulmonary secretion management, effectiveness of cough and sputum burden, swallowing adequacy, airway patency and assessment for use of speaking valves (ICS, 2024).

They play a key role in training patients/carers in the management of long-term tracheostomies ensuring a safe and timely discharge home.

The WAHT Physiotherapy team are available via a bleep Monday to Friday normal working hours and via switchboard out of hours/weekends for emergency on-call treatments.

10. Critical Care Outreach Team:

If the patient has been transferred from a Critical Care Unit to the ward the Outreach Team will follow the patient up at least until the tube is removed. For patients admitted to WAHT with an altered airway they are also available to offer support to the ward teams and provide advice on airways management, general medical status of the patient as well as teaching the nurses on the ward, the patient and their relatives about tracheostomy care.

The team are available during the day seven days a week to support. Please do not hesitate to contact a member of the team if there are any queries about tracheostomy care.

11. Discharge Planning from ICU to ward based care:

When tracheostomy patients are ready to step down from ICU to the ward they should be identified at the morning safety brief on ICU and discussed with the multidisciplinary team to ensure that they are transferred to one of the designated wards before 5pm
At WRH - Head and Neck Ward for Surgical patients, or Acute Respiratory Unit for Medical patients.
At the Alex - Ward 5 (Respiratory Ward)
Critical Care Outreach will liaise directly with Head and Neck ward at WRH following the safety brief and the transfer will be managed directly between the two wards to facilitate discharge as early as possible in the day with Outreach and Physiotherapy support.

Discharge Planning from Acute Care:

When a patient with a tracheostomy is ready for discharge from the hospitals please refer to:

- Adult Altered Airway discharge guidelines WAHT - KD - 030
- Altered Airway discharge pathway (AADP) WAHT - KD - 030

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Appendix 1. Bed head sign - Tracheostomy

This patient has a

TRACHEOSTOMY

There is a potentially patent upper airway (Intubation may be difficult)
Oxygen and nebulisation to be given via the neck in the first instance or by both routes if there is uncertainty about tracheostomy patency

Follow the TRACHEOSTOMY algorithm of breathing difficulties

Surgical/Percutaneous

Performed on .....

Tracheostomy tube type .....

Tracheostomy tube size .....

Patient Name .....

Grade of intubation .....

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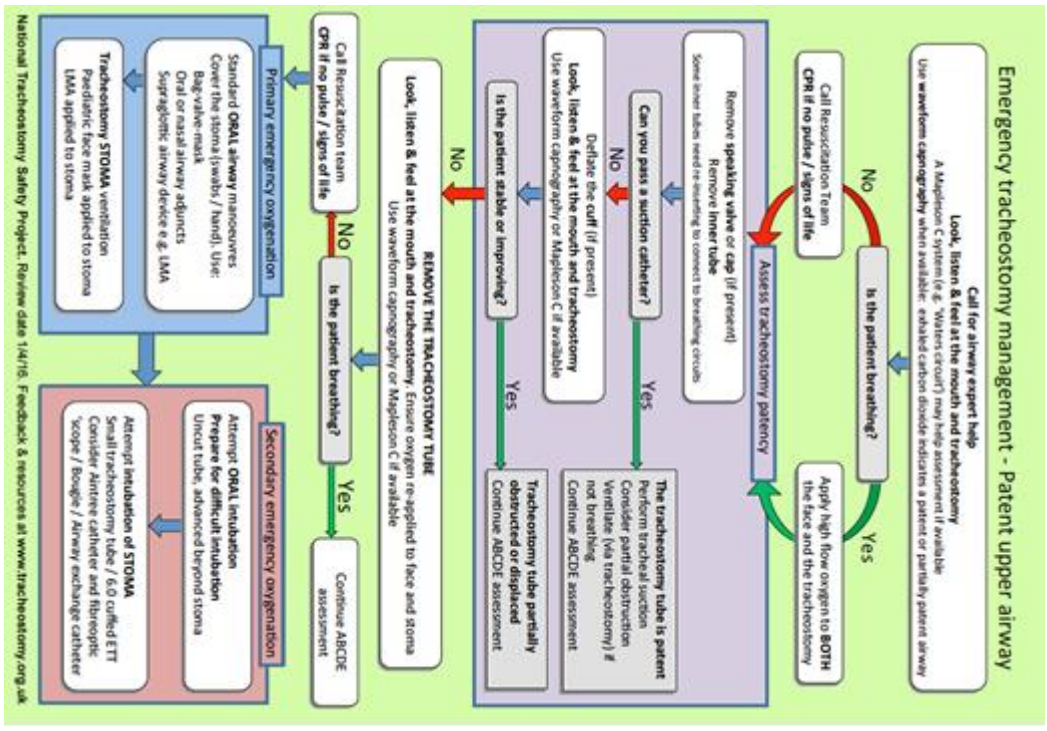


Appendix 2. Bed head sign – Laryngectomy

This patient has a

LARYNGECTOMY

and CANNOT be intubated, oxygenated or resuscitated via the mouth

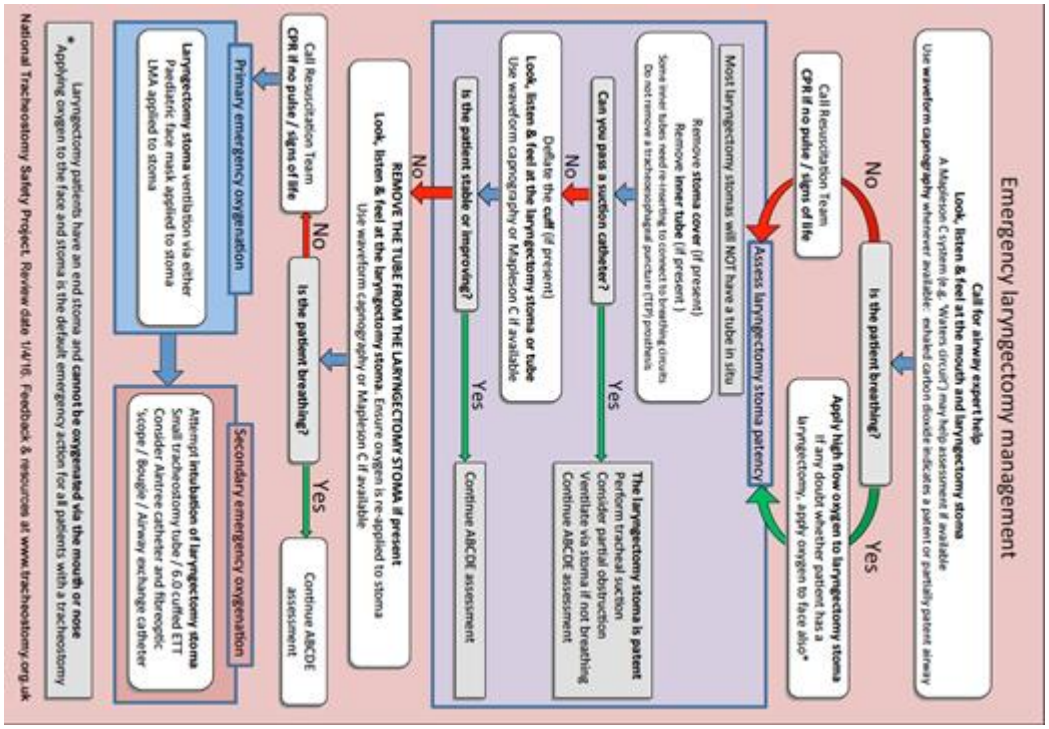
Follow the LARYNGECTOMY algorithm of breathing difficulties

Performed on (date) .....

Tube size (if present) .....

Patient Name .....

Worcestershire Acute Hospitals NHS Trust



Appendix 3. Emergency box contents

TRACHEOSTOMY BOX CONTENTS:

2 spare tracheostomy tubes:
1 same size as current one
1 size smaller than current one
1 cuffed tube of the same size in case of resuscitation
Tracheal dilators
Tracheostomy tube holder or tapes
Stitch cutters
Lubricating gel
Gauze
Tracheostomy dressing
10ml syringe
Occlusive dressing
Carbon dioxide detector

WITHIN THE BEDSPACE:

Oxygen and humidification device
Waters Circuit
Bag/Valve/Mask
Suction unit, tubing and appropriate catheters
Yankeur suction
Sterile gloves
Tracheostomy care pathway
Bed head sign – Trach/Lary