

CLINICAL GUIDELINE

Patient with a Tracheostomy Tube, Community Nursing Care

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.

Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

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NHS GG&C has made every effort to ensure this guideline does not have the effect of discriminating, directly or indirectly, against employees, patients, contractors or visitors on grounds of race, colour, age, nationality, ethnic (or national) origin, sex, sexual orientation, marital status, religious belief or disability. This guideline will apply equally to full and part time employees. All NHSGG&C guidelines can be provided in large print or Braille formats if requested, and language line interpreter services are available to individuals of different nationalities who require them.

Introduction

A Tracheostomy is a surgical opening in the anterior wall of the trachea to facilitate breathing. This procedure may be carried out for many reasons, most commonly to secure and maintain a clear airway where there is a risk of obstruction. Tracheostomy care involves making the safety and the comfort of the patient with a tracheostomy paramount. This is an abbreviated guide intended for Community Nursing Staff caring for patients in their own home. It must be used in combination with:

- Best Practice Statement (March 2007) Caring for the patient with a tracheostomy. NHS Quality Improvement Scotland, 2007. <u>http://www.healthcareimprovementscotland.org/previous_resources/best_practice_st_atement/tracheostomy_care.aspx</u>
- NHS Greater Glasgow and Clyde Guidelines for Care of Patients with a Tracheostomy Tube <u>http://www.nhsggc.org.uk/content/default.asp?page=s1214</u>

Scope

This guideline applies to all Registered Nurses working within the District Nursing Service in NHSGG&C to undertake the care of a patient with a Tracheostomy safely in accordance with local policy and to reduce the risks associated with tracheostomy.

Professional Accountability

As a professional practitioner you are personally accountable for your actions and omissions and must always be able to justify your actions. It is the responsibility of each practitioner to ensure competency in tracheostomy management in the context of patient-centred care, infection control and risk management prior to carrying out any procedure associated with tracheostomy. NMC (2015) and Best Practice Statement (2007).

Criteria

Patients living in the community (16 years and over) who are unable to care for their tracheostomy tube independently should be assessed by the District Nurse and, where appropriate, referred to the Referring Department for additional support and advice.

Any changes to the patient's management should be clearly documented and communicated to all those involved in the care of that individual.

Roles and Responsibilities

The nurse must ensure that they are competent in the following before undertaking the procedure:

- All healthcare workers have a professional responsibility to ensure they maintain competency in caring for a patient with a tracheostomy.
- Good communication skills to enable the nurse to relieve anxiety in the patient and the carer and to provide education in self care.
- The recognition that best care will go beyond the recognition and addressing of physical need and responsibility for psychological support may be necessary.
- National Standard Infection Control Precautions (SICPs).
- Disposal of sharps safely as per local policy (NHSGG&C Prevention and Control of Infection Clinical Waste Policy)
- Comply with Record Keeping Policy (NHS GGC 'Professional Standards for Record Keeping')

Clinical Assessment

Clinical assessment of patients with tracheostomy requires a holistic approach with the aim of identifying actual or potential problems. Clinical assessment should include, but not be limited to the identification of the following:

- Respiratory distress
- Increased respiratory rate
- Deterioration in oxygenation
- Patient complains of shortness of breath
- Tachycardia
- Hypotension
- Change in the level of consciousness
- Ongoing concern or unresolved issues relating to the airway
- Difficulty removing secretions either by suctioning or expectoration

Complications

Infection of stoma site Infection of Bronchial Tree Tracheal Ulceration Tracheal Necrosis Tube blockage with secretions Haemorrhage (minor or Severe) Tube migration to pre-tracheal space Accidental decannulation Tracheo-oesophageal fistula formation Risk of occlusion in obese or fatigued patients who have difficulty extending their neck

Changing the Outer Tracheostomy Tube

The first change is done by medical staff i.e. doctor or anaesthetist or suitably trained senior nurse.

- A first main tube change takes place 3 to 7 days post procedure
- Tubes with inner cannula can remain in place for 29/31 days according to the manufacturer's guidelines.
- If the patient is using a silver tube (which does not have an inner cannula) it should be changed every 5-7 days. Assessment is on an individual basis as patients with excessive secretions may require more frequent changes.
- Inner tube will be changed daily or as per individual assessment.

Equipment

- Disposable gloves, apron,
- Sterile dressing pack.
- Water soluble lubricating jelly.
- 0.9% Normal Saline sachet.
- Correct size of tracheostomy tube with introducer. There should also be tracheostomy tube one size smaller within easy reach.
- Tube holder or ties.
- A barrier film for around new stomas.
- Tracheal dilators which should be provided by discharging ward. Tracheal dilators should be to hand at all times in case of an emergency
- 10ml syringe if tracheostomy is cuffed and a manometer which should be provided by discharging hospital ward.
- Receptacle for dirty tube.
- The use of dressing around the stoma site is unnecessary, (with the exception of silver tubes). If dressings are indicated based on a clinical need, (gauze should not be used as the fibres could be inhaled). A polyurethane type dressing may be recommended and should be selected from GG&C Formulary.

Procedure for Changing a Tracheostomy Tube

- Two people required for this procedure (except in an emergency)
- A planned procedure during working hours normally between 08:30-16:30 hrs (exception in an emergency)
- Explain the procedure to the patient
- Position patient on a bed in a semi-recumbent position making sure the neck is extended. (Caution should be used in positioning patients who suffer from COPD)
- Wash hands and prepare a dressing trolley or tray.
- Put on disposable apron, gloves.
- Open dressing pack and empty tracheostomy pack onto it.
- Tracheal dilators should be to hand at all times in case of an emergency.
- Check tube, making sure the introducer can be easily removed.
- If cuffed tube, check the cuff by inflating it and observe that it does not deflate spontaneously, then deflate again with a 10ml syringe.
- Lubricate the tracheostomy tube sparingly with water-soluble lubricant jelly.
- Prior to the tube change, deflate cuff (if applicable), suction to remove secretions, Allow patient time to cough, release the tracheostomy tapes or ties remove the old tube.

Advise patient to take several deep breaths prior to removal of existing tube. Secretions that have been sitting below/above the cuff will be dislodged once cuff removed. It is important for the patient to clear these as best they can before changing the tube. Once secretions clear, check if that patient can take deep breaths comfortably before proceeding.

- Clean around stoma with normal saline and apply a barrier film if applicable.
- Insert clean lubricated tube with introducer using an up and down action. Remove the introducer immediately.
- Secure the tube with tracheostomy tapes or ties.
- Insert inner tube if applicable.
- Inflate cuff if using a cuffed tube and check pressure with manometer.
- Observe the patient for respiratory distress.
 Observe chest movement.
 Feel for respirations at the opening of the tracheostomy tube These steps indicate correct positioning.
 Record the tube change in the nursing notes.
 Document time, date, size and type of tube Record any Complications

Suctioning of a Patient with a Tracheostomy Tube

- 1. Suctioning should only be carried out after individual assessment, when patients are unable to clear their own airway.
- Patients should not be suctioned without an inner cannula insitu, unless in an emergency.
- Patients should not be suctioned with a fenestrated inner cannula insitu, unless in an emergency
- 4. Suctioning should maximise removal of secretions with minimal tissue damage and hypoxia, on the lowest possible vacuum pressure (NHSGG&C 2013)
- 5. Choose correct size suction catheter, it should be no greater than 50% of the inner diameter of the tracheostomy. (Full list of sizes NHSGG&C 2013).
- 6. Place a clean disposable glove onto the dominant hand and avoid touching anything with it except for the sterile suction catheter.
- 7. With the suction off introduce the catheter into the tracheostomy tube, gently but quickly inserting to approximately 1/3 of its length, until the patient coughs, resistance is felt. Suction catheter should not be inserted more than 10cm into trachea
- 8. Withdraw the tip of the catheter approximately 0.5cms then apply suction continuously whilst withdrawing the catheter from the tracheostomy tube, <u>Suction should be applied</u> for NO LONGER THAN 10 SECONDS.
- **9.** Release the suction, remove the catheter and glove and discard, re-apply 02 if applicable. N.B <u>Single use catheter only</u>
- **10.** If further suctioning is indicated repeat steps 4 7 <u>NOTE; REPEATED SUCTION</u> <u>CAUSES HYPOXIA AND IS DISTRESSING FOR THE PATIENT.</u>
- 9. Clean tubing by suctioning fresh water

Caring for Tracheostomy Tube

- All patients with a tracheostomy have tubes cleaned or replaced as appropriate following the manufacturer's guidelines and in line with infection control policies.
- Brushes are not used on plastic tubes unless specifically recommended by the manufacturer as they may cause damage to the lining of the tube.
- To comply with safety regulations and prevent tube damage with inappropriate cleaning, all tracheostomy tubes should be replaced following the manufacturer's guidelines
- Encourage patient and or carer to clean tube under a running tap, air dry and store in a clean dry area.

Inner Tube Management

- Inner cannulae reduce the lumen of the outer tracheostomy tube increasing respiratory effort; therefore it is important that the inner cannula remains free from secretions.
- Inner tubes are designed to allow easy removal for cleaning without having to remove the outer tube.
- The inner tube may be cleaned with warm water and air-dried prior to insertion.
- The inner tube can be removed in the event of obstruction of the patient's airway with secretions.
- All patients with an Inner cannula require individual assessment of the frequency of inner cannula care.
- Documentation should identify the type of tube in situ, the amount of secretions the patient produces and frequency of cleaning.

All patients with a tracheostomy inner tube require individual assessment of the frequency of inner tube care to ensure their tube remains free from secretions. (Refer to main NHS GG&C guidelines.)

Safe Disposal of Sharps

As per local NHSGG&C policy (NHSGG&C Clinical Waste Policy – Sharps disposal in the home setting - designated sharps box conforming to BS 7320).

Appendix

Exert from the Acute Guideline demonstrating how to change tubing.

http://www.tracheostomy.org.uk/storage/files/Tube%20changes.pdf

and

http://www.tracheostomy.org.uk/healthcare-staff/basic-care/changing-a-tracheostomy-tube

References

Best Practice Statement – March 2007 Caring for the patient with a tracheostomy. NHS Quality Improvement Scotland (2007) http://www.healthcareimprovementscotland.org/previous_resources/best_practice_statement/tracheostomy_care.aspx

NHS Greater Glasgow and Clyde Guidelines for Care of Patients with a Tracheostomy Tube NMC Record Keeping Guidance for Nurses and Midwives (2009) http://www.nhsggc.org.uk/content/default.asp?page=s1214

NMC Code (2015)

NHSGG&C Prevention and Control of infection Clinical Waste Policy