

Ward-based Tracheostomy Changes: A Guide for ACCU Trainees (Refer to Trust Tracheostomy Guideline for full detail)

General points:

- A tracheostomy should be changed at least every 28 days, as per manufacturer's recommendation
- First change of percutaneous tracheostomy should be performed by an airway-trained doctor from ACCU with a skilled assistant (eg CCOT nurse / physiotherapist)
- Subsequent percutaneous tracheostomy changes can be performed by any appropriately trained professional (eg physiotherapist)
- First and subsequent changes of surgical tracheostomies can be performed by any appropriately trained professional

Indications for routine changes:

- Down-sizing to facilitate wean (including swallowing and speech)
- 28 days post-insertion
- Cuff (or other) malfunction (Retain malfunctioning product for return to manufacturer, complete Datix and inform tracheostomy team)
- Exchange of single-lumen or non-standard tracheostomy tube (eg from another Trust). NB Patients on the general wards MUST have a double-lumen tracheostomy tube

Potential exclusions / cautions:

- Difficult initial tracheostomy placement
- Abnormal appearance of stoma (including bleeding / excess granulation tissue etc)
- Unstable C-spine or inability to extend neck
- Difficult airway or complex anatomy

Anaesthetic drugs must NOT be used for routine tracheostomy changes on the wards. It is acceptable to have them available in the 'Grab Bag' for emergency use but they should NOT be left on the ward after the procedure.

Similarly, a bougie (or suction catheter / airway exchange catheter) should NOT be routinely used as it is much easier and less traumatic to insert a tracheostomy tube using the manufacturer's introducer provided (see photo).



If you anticipate procedural difficulty, the tracheostomy change should be discussed with an ACCU consultant and consideration given to changing the tracheostomy in theatre with an airway surgeon and skilled assistance present and immediate access to all airway equipment.

FASTING: For routine changes, where no anaesthetic drugs are given, a 1 hour fast and aspiration of the NG tube should be sufficient (in fact, in the community patients are not fasted at all). The clinician taking responsibility for the tracheostomy change can elect for a longer fasting period if they judge it necessary due to particular patient characteristics (eg vomiting / large NG aspirates in conjunction with poor airway protective reflexes).

Complicated tracheostomy changes should not take place on the ward.

Equipment:

- Ensure resuscitation equipment and CO₂ detection ('Easicap') available on ward. (NB capnography not necessary for routine tracheostomy changes)
- Airway equipment available
- Suction equipment
- Pulse oximetry
- Oxygen supply and delivery device
- Two tracheostomy tubes with introducers (one of same size and one of next size down)
- Sterile tracheal dilator (for emergency use only- not usually required)
- Tracheostomy ties
- Dressing pack
- Stitch cutter
- Cleaning solution (0.9% saline)
- Sterile gloves
- 10ml syringe
- Lubricating gel

Procedure:

- Ensure patient is fasted appropriately (see above)
- Explain the procedure to the patient or their surrogate
- Position patient 45° head-up with a pillow under the shoulders to extend the neck and remove head pillows
- Wash hands and don clean gloves
- Apply 15 l/min oxygen via face-mask with reservoir bag and monitor saturations throughout
- Prepare tracheostomy tube with introducer, check the cuff and lubricate the tube
- Cut any flange sutures still present
- Suction oropharynx and via tracheostomy prior to cuff deflation
- Deflate cuff and suction again if necessary. Ask patient to cough if able
- Remove tracheostomy tube
- Insert new tracheostomy tube, starting with the tracheostomy tube at 90° to the trachea and rotating its tip caudally whilst advancing (the hand moves cranially)
- Immediately remove the introducer
- Look, listen and feel for air flow via the tracheostomy. Use capnograph if concerned
- Insert inner tube and ensure correctly locked into place
- Inflate cuff, if required
- Secure the tube with tracheostomy ties
- Remove rescue suture, if still present
- Replace tracheostomy mask and ensure oxygen saturations are maintained
- Auscultate lungs and request CXR if any concerns
- Request increased respiratory observations following tube change (every 15 minutes for 2 hours)
- Document the procedure:
 - The product sticker MUST be placed on the Tracheostomy Passport, as well as completing the date of change and operator's name
 - The tracheostomy change should also be noted in the medical record, with the second product sticker