Vanderbilt University Medical Center
Division of Trauma
Nurse Practitioner Protocols

Protocol: Downsizing Tracheostomy Tubes

Purpose:
To describe the procedure for safe downsizing of patient tracheostomy tube.

Indication:
Procedure done as step towards weaning patient from tracheostomy tube by downsizing the tracheostomy tube diameter and may be done by trauma NP as directed by trauma attending, fellow or senior resident.

Procedure:
A. Equipment
1. new tracheostomy tube with obturator (usually tracheostomy tube downsized from size #8 to #5 – cuffed or uncuffed depending on trauma team preference)
2. intubation kit and ambu bag at bedside
3. suction source
4. sterile suction catheter kit
5. rigid pharyngeal suction tip (Yankauer)
6. pulse oximetry
7. personal protective equipment

B. Procedure:
1. don personal protective equipment (mask, gloves)
2. place patient on pulse oximetry and assure emergency airway equipment is at bedside
3. hyperoxygenate and suction tracheostomy tube to remove secretions
4. remove trach ties from tracheostomy tube neckplate
5. insert syringe into pilot balloon
6. instruct patient to take deep breath
7. at peak of deep inspiration: deflate the cuff, remove the old tracheostomy tube in one motion on inspiration, and insert new tracheostomy tube with obturator into tracheostomy stoma, remove obturator, insert tracheostomy tube inner cannula and lock into place, insert air into cuff if cuffed
8. encourage the patient to deep breathe and cough
9. suction new tracheostomy if needed
10. observe patient for signs/symptoms of respiratory difficulty or distress
11. write procedure note in patient’s chart documenting: type and size of old tracheostomy tube removed and type and size of new tracheostomy tube inserted, patient’s pulse oximetry values before and after procedure, any complications encountered, and patient tolerance of procedure
12. make sure obturator is placed in a plastic bag and kept at the bedside if needed for emergent tracheostomy tube reinsertion if the patient is accidentally decannulated
C. NP must perform 5 successful tracheotomy downsizes under the direct supervision of a resident/fellow/attending before performing independently. As well, NP must perform at least 10 tracheostomy downsizes per year in order to maintain competency.

D. Document procedure on skill check off sheet

References
