Rancho Los Amigos National Rehabilitation Center DEPARTMENT OF NURSING CLINICAL POLICY AND PROCEDURE

SUBJECT: TRACHEOSTOMY CARE

Policy No.: C143 Effective Date: 09/1993 Page: 1 of 3

Purpose of Procedure: To maintain patient's airway by keeping the inner cannula patent; to prevent respiratory tract infection, and to prevent skin breakdown at and around the stoma site.

Physician's Order Required: No

Special Considerations:

This procedure is performed using sterile technique on non-disposable inner cannulas and clean technique on disposable inner cannulas. Pediatric-sized tracheostomy tubes do not have inner cannulas; care must be provided to the stoma and tracheostomy tube plate.

Performed by: RN, LVN, Respiratory Care Practitioner (RCP), and Affiliating Nursing Students (under the supervision of an RN)

Frequency: Every shift and PRN

Equipment: Non-Disposable Inner Cannula

- 1. Sterile tracheostomy care kit
- 2. 0.9% normal saline (NS)
- 3. Hydrogen Peroxide (H2O2)
- 4. Disposable gloves
- 5. Extra sterile cotton-tipped applicators
- 6. Scissors, if twill tape will be used
- 7. Velcro tracheostomy-tube holder, if indicated
- 8. Suctioning supplies and equipment
- 9. Plastic bag
- 10. Disposable inner cannula (for ventilator patients)

Disposable Inner Cannula

- 1. Disposable tray
- 2. 1 clean cup
- 3. 0.9% normal saline (NS)
- 4. Disposable gloves
- 5. Cotton-tipped applicators
- 6. Tracheostomy dressing
- 7. Scissors, if twill tape will be used
- 8. Velcro tracheostomy-tube holder, if indicated
- 9. Suctioning supplies and equipment

- 10. Plastic bag
- 11. Replacement inner cannula

PROCEDURAL STEPS:

- 1. Gather and prepare supplies
- 2. Perform hand hygiene
- 3. Provide privacy
- 4. Confirm patient's identity using 2 patient identifiers
- 5. Assess patient's condition
- 6. Explain procedure to patient and family
- 7. Raise the bed to waist level
- 8. Elevate the head of the bed to 30-45 degrees unless contraindicated
- 9. Perform hand hygiene
- 10. Don clean gloves and other PPE as needed
- 11. Suction patient if needed (refer to policy C142- Suctioning Techniques)
- 12. Remove dressing and inspect the stoma for discharge and signs of infection
- 13. Remove and discard gloves

FOR NON-DISPOSABLE INNER CANNULA (Sterile Technique):

- 1. Perform hand hygiene
- 2. Open and prepare sterile field and supplies
 - a. Pour 1/2 NS and 1/2 H2O2 into one sterile tray compartment
 - b. Pour sterile NS into another compartment
- 3. Don sterile gloves
- 4. Cleanse the stoma and surrounding area using sterile NS moistened applicators, cleanse area next to the tube first and proceed in a semi-circular motion outward, repeat as necessary. **KEY POINT**: The use of hydrogen peroxide has been found to delay the healing of the stoma.
- 5. Apply a skin barrier as needed
- 6. Clean tracheostomy tube plate using sterile NS moistened applicators. ½ NS and ½ H2O2 solution may be used to loosen dried secretions if needed. If this solution is used, the area must be rinsed using a NS moistened gauze.
- 7. Remove the inner cannula and place it into the compartment with the ½ NS and ½ H2O2 solution. **KEY POINT:** Do not soak any part of the tube in any solution including hydrogen peroxide, this may compromise the integrity of the tube.

KEY POINT: For ventilator patients place a temporary inner cannula and reconnect the ventilator before proceeding

- 8. Use dominant hand to scrub the inner cannula with a sterile nylon brush or the sterile pipe cleaners
- 9. Immerse the cannula in sterile NS and agitate for approximately 10 seconds to rinse
- 10. Inspect the cannula for cleanliness and repeat the cleaning process if necessary
- 11. Remove excess liquid from the cannula
- 12. Reinsert the inner cannula and lock it into place
- 13. Tracheostomy Securement
 - a. If twill tape is used, replace the old tape using the double string method. The old twill tape remains tied until the new tape is secured. The old tape is then cut and removed.
 - b. The twill tape or Velcro trach tube holder are changed PRN
 - c. Ensure that there is one finger space between the tracheostomy ties/holder and the patient's neck.

KEY POINT: Notify Primary MD for ENT consult if twill tape is used for possible change to Velcro tracheostomy tube holder.

14. Apply antimicrobial ointment to stoma if ordered

- 15. Apply dressing to absorb secretions and provide padding
 - **KEY POINT:** Do not cut dressing. Loose fibers can cause irritation and increase the risk of infection around the stoma site.
- 16. Assist with oral hygiene, as needed.
- 17. Dispose of used supplies properly
- 18. Remove gloves and perform hand hygiene

FOR DISPOSABLE INNER CANNULA (Clean Technique):

- 1. Perform hand hygiene
- 2. Open supplies and prepare field
- a. Pour NS into clean cup
- 3. Don clean gloves
- 4. Using dominant hand, remove the inner cannula, inspect the secretions, and dispose of inner cannula appropriately
- 5. Insert a new inner cannula and lock it securely into place
- 6. Replace the oxygen, humidification, or ventilation device, if present
- 7. Remove and discard gloves
- 8. Perform hand hygiene
- 9. Cleanse the stoma and surrounding area using NS moistened applicators. Cleanse area next to the tube first and proceed in a semi-circular motion outward, repeat as necessary.

KEY POINT: The use of hydrogen peroxide has been found to delay the healing of the stoma.

10. Apply a skin barrier as needed

11. Clean tracheostomy tube plate using NS moistened applicators. $\frac{1}{2}$ NS and $\frac{1}{2}$ H2O2 solution may be used to loosen dried secretions if needed. If this solution is used, the area must be rinsed using a NS moistened gauze.

- 12.. Tracheostomy Securement
 - a. If twill tape is used, replace the old tape using the double string method. The old twill tape remains tied until the new tape is secured. The old tape is then cut and removed.
 - b. The twill tape or Velcro trach tube holder are changed PRN

KEY POINT: Ensure that there is one finger space between the tracheostomy ties/holder and the patient's neck.

KEY POINT: Notify Primary MD for ENT consult if twill tape is used for possible change to Velcro tracheostomy tube holder.

- 13. Apply antimicrobial ointment to stoma if ordered
- 14. Apply dressing to absorb secretions and provide padding

KEY POINT: Do not cut dressing. Loose fibers can cause irritation and increase the risk of infection around the stoma site.

- 15. Assist with oral hygiene, as needed.
- 16. Dispose of used supplies properly
- 17. Remove gloves and perform hand hygiene

PATIENT EDUCATION

- 1. Instruct patient / family / caregiver to report abnormal signs and symptoms such as drainage, redness, swelling, skin breakdown, odor, etc.
- 2. When appropriate, encourage patient / family / caregiver participation. Cognitively intact patients should be able to explain all procedural steps.

KEY POINT: Patient/family education will consist of clean technique to prepare for discharge.

DOCUMENTATION

1. Record the procedure, assessment findings, and education provided to patient/family in the medical record.

REVIEWED BY: Laurie Linares, BSN, RN, PCCN

REFERENCES:

AACN. (2017). AACN Procedure Manual for High Acuity, Progressive and Critical Care (7th ed.). (D. L. Wiegand, Ed.) St. Louis: Elsevier.

Bodenham, A., et al. (2018). Standards for the care of adult patients with a temporary tracheostomy: Standards and guidelines.

Lippincott Procedures. (2021, November 19). Tracheostomy ties change.

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09/93 – Revised 12/96 – Revised 10/99 – Revised 03/00 – Revised 07/01 – Revised 02/04 - Reviewed 08/08 – Revised 03/12 – Revised (combined with C143.10) 09/15 – Revised 07/16 – Revised 08/19 – Revised 07/22 – Revised