## Tracheostomy: Care and Cleaning of Inner Cannula and Stoma

### I. Personnel Involved

- A. School Nurse
- B. Designated school personnel under direct or indirect supervision
- C. School Nurse as procedural supervision

#### **II.** General Information

- A. Care and cleaning of the inner cannula and stoma should be done routinely at home unless the pupil's condition necessitates more frequent care that must be provided during the school day.
- B. A designated person trained in the care and cleaning of the inner cannula and stoma must be on site whenever a pupil requiring this care is at school.
- C. An extra inner cannula must be kept with the pupil.
- D. The pupil's program is arranged so that he or she is within easy access to the necessary equipment.
- E. This procedure requires a physician's authorization. The service must be reauthorized yearly by the prescribing physician and the parent.

#### III. Guidelines

- A. Purposes
  - 1. To maintain an airway by keeping the inner cannula open and free of secretion and exudate.
  - 2. To prevent infection.
  - 3. To prevent irritation of tissue around the tracheostomy tube.
  - 4. To maintain an airway when there is:
    - a. Labored or interrupted breathing
    - b. Excessive discharges or mucus plugs.
    - c. Restlessness and/or apprehension.
    - d. Dry, crusty secretions around the tracheostomy tube.
- B. Equipment (Parents are responsible for providing equipment.)
  - 1. Paper cups (nonwaxed)
  - 2. Cotton-tipped applicators
  - 3. Hydrogen peroxide solution, full strength
  - 4. Pipe cleaners or plastic drinking straws or both
  - 5. Gloves (clean, disposable) (They must be sterile if the sterile technique is used.)
  - 6. Twill tape and tracheal ties
  - 7. Antimicrobial ointments if ordered by the physician
  - 8. Sterilized tracheostomy dressing if indicated
  - 9. Adhesive tape if needed to secure the dressing
  - 10. Paper bag for disposal of wastes
  - 11. Suctioning supplies and equipment
  - 12. Clean scissors if tracheal ties are to be changed
  - 13. Sterile saline solution of water

# Tracheostomy: Care and Cleaning of Inner Cannula and Stoma **Procedure**

Essential steps	Key points and precautions	Child specific
<ol> <li>Preparation of the pupil         <ul> <li>Explain the procedure to the pupil and ways for him or her to assist.</li> <li>Position the pupil, with the tracheostomy area exposed.</li> </ul> </li> </ol>	If the pupil is spastic, restless, agitated, or confused, he or she may need to be restrained during the procedure Elevating the head of the bed provides drainage of the cleansing solution on the pupil's chest rather than into the tracheal opening.	
<ol> <li>Preparation of the equipment         Assemble supplies and take them to         the pupil</li> <li>Method         a. Wash hands.         b. Set out three paper cups         c. Fill one cup with hydrogen         peroxide and one with sterile         saline solution.         d. Place two to four cotton-tipped         applicators in the third cup.         e. Put on gloves.         f. Remove the soiled gauze         dressing.</li> </ol>	Normal saline solution may be used instead of hydrogen peroxide if indicated.  Removing the soiled dressing reduces the number of contaminates at the area to be cleaned.	
<ul> <li>g. Discard the dressing in a paper bag.</li> <li>h. Using an applicator moistened with hydrogen peroxide, cleanse the stoma at least 1 inch (2.54 cm) beyond the outer cannula.</li> <li>i. Discard used applicators into a</li> </ul>	Do not wipe over the area more than once with the same applicator. Cleanse the area next to tube first and proceed outward, using a circular motion.	
paper bag. j. Using a dry applicator, wipe the cleansed area, drying it thoroughly.	Rinsing off hydrogen peroxide is not essential.	
<ul> <li>k. Unlock and remove the inner cannula, holding the outer cannula in place.</li> <li>l. Place the inner cannula in a paper cup filled with hydrogen peroxide.</li> <li>m. Soak the inner cannula in peroxide (1 to 5 minutes). <i>Note</i>: The sequence of prior steps may be altered if the inner cannula requires a longer time to soak to remove tenacious mucus. Begin with step k, continue through step n, and follow with cleaning the stomal area (steps g through k).</li> </ul>	Be sure that the cup is filled to cover the inner cannula completely.  Removes mucus by bubbling action.	

- n. Cleanse the inner cannula with pipe cleaners or plastic drinking straws.
- o. Pour sterile saline or water into a cup and allow the inner cannula to soak for a brief time.
- p. Remove the cannula from the cup and pour sterile saline solution or water over it until it is thoroughly clean.
- q. Shake out excess moisture; put in a clean paper cup.
- Pour out any peroxide and saline solution and discard the paper cup and pipe cleaners.
- s. Take off gloves and discard them.
- t. Suction the outer cannula and airway according to appropriate suctioning procedure if necessary.
- u. Replace the inner cannula and secure it in place.
- v. Determine whether the pupil is ventilating adequately.
- w. Apply antimicrobial ointments if ordered by the prescribing physician.
- x. Apply gauze dressing if needed to help hold the tracheal tube in position or to decrease air leaks.
- 4. Care of pupil
  - a. Check whether the pupil is being adequately ventilated (an ongoing procedure).
  - b. Check whether the tracheostomy tube is positioned properly.
- 5. Care of equipment
  - a. Dispose of all supplies after use.
  - b. Wash hands.
- 6. Record the procedure on the SPHCS log.

Using two pipe cleaners of doubling the end of a pipe cleaner provides more effective cleansing than using one cleaner does.

Replace the inner cannula as soon as possible after cleaning to prevent mucus plus from forming in the outer cannula.

Indiscriminate use of ointments may increase bacterial growth.

When secretions are excessive, the dressing must be changed frequently, and the area must be kept dry.

A brisk, thorough handwashing with soap and water is the most effective means of preventing the spread of organisms.