SKILL 48

Tracheostomy Tube or Inner Cannula Cleaning

EQUIPMENT

Appropriately sized resuscitation equipment (mask, valve, bag)

Oxygen and humidity delivery source

Suction source, canister, and connecting tubing

Gloves, mask, goggles, gown (as appropriate)

Spare tracheostomy tubes (see note below)

Spare tracheostomy tube holder

Appropriately sized suction catheter pack (#8 to #10 French for children, #5 to #8 French for infants)

Oxygen flow meter and blender

Pulse oximeter

Cardiorespiratory monitor

Bandage scissors and small hemostats

Half-strength peroxide

Normal saline or sterile water

Pre-slit Sof-Wick dressing

Cotton-tipped applicators

Precut twill tape

Clean, dry containers (2)

Towel

NOTE: For a new tracheostomy, spare tracheostomy tubes should include same size and $^{1}/_{2}$ size smaller. For an established tracheostomy, spare tracheostomy tubes should be same size.

NOTE: Equipment may be available in a prepackaged kit.

SAFETY

- 1. Prevent potential aspiration by maintaining environment free of safety hazards.
- 2. Routine site care should not be done for the first 48 hours following the initial tracheostomy tube placement.
- 3. Routine tracheostomy site care and dressing change should be done at least once a shift or any time the site or dressing becomes wet or soiled. Do not use gauze dressing as loose filaments may be inhaled into the tracheostomy.
- 4. All tracheostomy tube changes/replacements are a twoperson procedure.
- 5. Be gentle in all aspects of care. Clients should not feel any discomfort or unpleasant feelings at the site.
- 6. Be alert to complications including obstruction, hemorrhage, subcutaneous emphysema, tube dislodgement, periostomal irritation, redness, or breakdown.

- 7. Notify physician immediately of dislodged or displaced tube. Maintain patent airway via stoma or mouth/nose ventilation.
- Initiate "Code Blue" and provide resuscitation if child experiences respiratory failure or does not have a patent airway.

PROCEDURE

- Gather equipment. Improves organization and effectiveness.
- 2. Wash hands. Reduces transmission of microorganisms.
- 3. Identify an assistant to help position, assist in tube change, hold and comfort child as necessary.
- 4. Prepare child and family. Provide child/family with ageappropriate explanation of procedure. Consider having someone support or comfort the child. *Enhances cooperation and parental participation and reduces anxiety and fear.*
- 5. Perform baseline respiratory assessment.
- Don mask, gloves, goggles, and gown (as needed).
 Observe standard body substance precautions according to policy.
- Assemble supplies and equipment. Open Sof-Wick dressing packets and cotton-tipped applicators; pour normal saline/sterile water and hydrogen peroxide into containers.
- 8. Position child by exposing the neck and straightening the airway (avoid hyperextension). If necessary, a rolled towel or diaper may be placed under the child's shoulders and the neck extended. The sniffing position is ideal. Use the least restrictive immobilizing methods when positioning the child.
- 9. Preoxygenate child as needed (and at any time during the procedure).
- 10. Unlock the inner cannula, inspect for any damage, cracks, chips, rough areas, and so forth. Clean inside and outside of the tracheostomy tube or cannula with tap water using pipe cleaners and soft-tipped applicators. Rinse cannula.
- 11. Place cannula into the container with hydrogen peroxide. Agitate vigorously for 1–2 minutes. Allow cannula to air dry for as long as possible. Replace the inner cannula and lock into place.
- 12. Gently lift the tracheostomy tube flange and remove the soiled dressing.

SKILL 48

Tracheostomy Tube or Inner Cannula Cleaning

continued



FIGURE 31D Clean stoma site with halfstrength peroxide, moving outward from stoma site in a circular fashion.

- 13. Using the cotton-tipped applicators moistened with half-strength peroxide, begin cleaning around the stoma site, always moving outward from the stoma. Never clean toward the stoma. Use as many applicators as needed to remove secretions. Avoid dripping peroxide into stoma site. (Figure 31D)
- 14. Rinse the area using applicators soaked with normal saline or sterile water, always moving outward from the stoma. Cleanse the area behind the flanges of the tracheostomy and around the neck with damp gauze, observing for redness or skin breakdown.
- 15. Dry the skin around the stoma and neck thoroughly, using clean, dry applicators and gauze as appropriate.
- 16. Place new Sof-Wick dressing under the tracheostomy tube flanges (if used) using hemostats and fingers. While assistant holds the tube in place, remove soiled ties from flange. Attach twill tape to the flange and tie securely. This should be tight enough to prevent dislodgement, but loose enough to fit one finger between tie and child's neck.
- 17. Monitor respiratory status and client response to procedure.

DOCUMENTATION

- 1. Client preparation and response to procedure, including respiratory status.
- 2. Condition of skin around stoma and neck.
- 3. Complications that might have occurred, e.g., accidental tube dislodgement or displacement.
- 4. Quantity and viscosity of respiratory secretions.