



TRACHEOSTOMY CARE

ASHA CHRISTINA

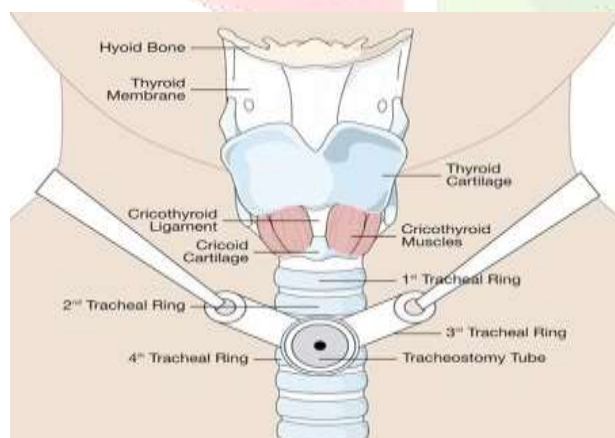
ASSISTANT PROFESSOR

BIHER

INTRODUCTION

A tracheostomy is an opening into the trachea through the neck just below the larynx through which an indwelling tube is placed and thus an artificial airway is created. It is used for clients needing long-term airway support.

Nurses provide tracheostomy care for clients with new or recent tracheostomy to maintain patency of the tube and minimize the risk for infection (since the inhaled air by the client is no longer filtered by the upper airways). Initially a tracheostomy may need to be suctioned and cleaned as often as every 1 to 2 hours. After the initial inflammatory response subsides, tracheostomy care may only need to be done once or twice a day, depending on the client.



INDICATIONS FOR TRACHEOSTOMY

- To maintain a patent airway when the ability to do this is temporarily or permanently compromised
- Bypass Obstructed airway
- Tumor
- Laryngeal edema
- Foreign body obstruction
- Facilitate removal of secretions
- Permit long-term ventilation
- prevent aspiration with prolonged coma
- Decrease work of breathing---severe COPD

ROUTINE MANAGEMENT

Routine tracheostomy management consists of:

- Equipment & environment
- Activities of daily living
- Supervision and Monitoring
- Humidification
- Suctioning
- Management of abnormal secretions
- Tracheostomy tube tie changes
- Tracheostomy tube changes
- Stoma Care
- Feeding and Nutrition
- Oral Care
- Communication

PROVIDING TRACHEOSTOMY CARE

Purposes

- To maintain airway patency by removing mucus and encrusted secretions.
- To maintain cleanliness and prevent infection at the tracheostomy site
- To facilitate healing and prevent skin excoriation around the tracheostomy incision
- To promote comfort
- To prevent displacement

Assessment

- Respiratory status (ease of breathing, rate, rhythm, depth, lung sounds, skin color, labored breathing, flared nares or sternal retractions, arterial blood gases and oxygen saturation level)
- Pulse rate
- Secretions from the tracheostomy site (character and amount)
- Presence of drainage on tracheostomy dressing or ties
- Appearance of incision (redness, swelling, purulent discharge, or odor)
- Identify factors that influence tracheostomy care:
 - Inadequate nutritional status predisposes client to infection, poor healing, and weak cough reflex.
 - Respiratory infection: pulmonary secretions increase in amount. Note color, amount, and odor.

- Fluid status: inadequate hydration increases tenaciousness of secretions. Client may have difficulty coughing up thick secretions.
- Humidity: tracheostomy collars deliver humidified air to prevent dry, cracked membranes and thickened secretions.
- Assess client's ability to understand and perform independent tracheostomy care.
- Tracheostomy Information
 - ✓ What should I know about my patient's trach:
 - ✓ What type is it?
 - ✓ What number?
 - ✓ Cuffed or cuff less—balloon inflated or deflated
 - ✓ Fenestrated/non-fenestrated?
 - ✓ Inner cannula disposable or reusable
 - ✓ Corked? For how long? What is the goal?

Preparation of articles.

- Sterile tracheostomy care kit containing:
 - - Two basins
 - sterile containers
 - – Small sterile nylon brush or pipe cleaners
 - - 4" × 4" gauze
 - sterile applicators
 - - Commercially available tracheostomy dressing
 - - Twill tape or tracheostomy ties
- Hydrogen peroxide
- Normal saline
- Sterile gloves
- Scissors
- Sterile suction catheter kit (suction catheter and sterile container for solution)
- Towel or drape to protect bed linens
- Moisture-proof bag
- Cotton twill ties

Procedure

Steps of procedure	Rationale
1. Verify the physician order and identify the client.	Prevents potential errors.
2. Wash your hands and wear gloves.	Handwashing and gloves reduce transmission of microorganisms.
3. Explain procedure to client. Place the client in semi- to high Fowler's position	Teaching decreases client anxiety and increases compliance.
4. Suction tracheostomy tube. Before discarding gloves, remove soiled tracheostomy dressing and discard with catheter inside glove. When suctioning through a tracheostomy tube, insert catheter about 10 to 12 cm (in an adult).	Removing secretions maintains a patent airway while doing tracheostomy cleaning.
5. Replace oxygen or humidification source	Maintain good oxygenation status. Promotes

and encourage client to deep-breathe as you prepare sterile supplies. Do not snap in place.	easy removal prior to sterile procedure.
6. Open sterile tracheostomy kit • Pour normal saline into one basin, hydrogen peroxide into the second. • Don Sterile gloves. Open several sterile cotton-tipped applicators and one sterile precut tracheostomy dressing and place on sterile field. • If kit does not contain tracheostomy ties, cut two 15-inch pieces of twill tape and set aside.	Preparing equipment allows for smooth, organized performance of tracheostomy care.
7. A) For tracheostomy tube with inner cannula, Remove oxygen source. The hand that touches the oxygen source is no longer sterile.	Prevents contamination of sterile gloves.
8. Unlock inner cannula by turning counterclockwise. Remove inner cannula. Place inner cannula in basin with hydrogen peroxide	Hydrogen peroxide loosens and removes secretions from inner cannula.
9. Replace oxygen source over or near outer cannula.	Maintain a constant supply of oxygen to prevent respiratory or cardiac distress. Note: Not all clients require a constant oxygen supply during tracheostomy care.
10. Clean lumen and sides of inner cannula using pipe cleaners or sterile brush	Mechanical force and friction are needed to remove thick or dried secretions.
11. Rinse inner cannula thoroughly by agitating in normal saline for several seconds	Rinsing and agitation remove secretions and water from cannula and provide lubrication for easy reinsertion.
12. Remove oxygen source and replace inner cannula into outer cannula. "Lock" by turning clockwise until the two blue dots align. Replace oxygen or humidity source.	Oxygen is reestablished to a secured inner cannula.
13. B) For tracheostomy tube without inner cannula or plugged with a button, complete. Remove tracheostomy dressing from under faceplate Clean stoma under faceplate with circular motion using hydrogen peroxide-soaked cotton applicators. Clean dried secretions from all exposed outer cannula surfaces.	Dried secretions are a good medium for bacterial growth.
14. Remove foaming secretions using normal saline-soaked, cotton-tipped applicators.	Hydrogen peroxide can be irritating to the skin.
15. Pat moist surfaces dry with 4" × 4" gauze.	Moist surfaces support growth of microorganisms and skin excoriation.
16. Place dry, sterile, precut tracheostomy dressing around tracheostomy stoma and under faceplate. Do not use cut 4" × 4" gauze	Frayed cotton fibers from cut gauze could be aspirated into the trachea.

17. If tracheostomy ties are to be changed, have an assistant with a sterile glove and hold the tracheostomy tube in place	This action prevents accidental displacement of the tracheostomy tube if the client moves or coughs when the ties are not secure.
For Tracheostomy Ties, Follow Steps 18. Cut a 12-inch slit approximately 1 inch from one end of both clean tracheostomy ties. This is easily done by folding back on itself 1 inch of the tie and cutting a small slit in the middle. 19. Remove and discard soiled tracheostomy ties. 20. Thread end of tie through cut slit in tie. Pull tight. 21. Repeat Step with the second tie.	The tie is secured to the faceplate without using knots. Knots are difficult to undo when ties become crusted with secretions.
22. Bring both ties together at one side of the client's neck. Assess that ties are only tight enough to allow one finger between tie and neck. Use two square knots to secure the ties. Trim excess tie length. Note: Assess tautness of tracheostomy ties frequently in clients whose neck may swell from trauma or surgery.	Ties must be taut enough to prevent accidental dislodging of tracheostomy tube but loose enough not to cause choking or pressure on the jugular veins. Ties at side of neck are more comfortable for the client.
For Tracheostomy Collar, Follow Steps 23. While an assisting nurse holds the faceplate, gently pull the Velcro tab and remove the collar on one side. Insert the new collar into the opening on the faceplate and secure the Velcro tab	
24. Hold faceplate in place as the assisting nurse repeats step on the second side.	
25. Remove the old collar and ensure that the new collar is securely in place.	
26. Remove gloves and discard disposable equipment. Label with date and time, and store reusable supplies.	Opened normal saline is considered sterile for 24 hours.
27. Assist client to comfortable position and offer oral hygiene.	Promotes client comfort.
28. Wash your hands.	Maintains infection control and communicates with other healthcare team members.

DEALING WITH EMERGENCIES

If the tracheostomy tube falls out

1. DON'T PANIC!
2. Once the tracheostomy tube has been in place for about 5 days the tract is well formed and will not suddenly close.
3. Reassure the patient
4. Call for medical help.
5. Ask the patient to breathe normally via their stoma while waiting for the doctor.
6. The stay suture (if present) or tracheal dilator may be used to help keep the stoma open if necessary.
7. Stay with patient.
8. Prepare for insertion of the new tracheostomy tube
9. Once replaced, tie the tube securely, leaving one finger-space between ties and the patient's neck.
10. Check tube position by (a) asking the patient to inhale deeply – they should be able to do so easily and comfortably, and (b) hold a piece of tissue in front of the opening – it should be “blown” during patient's exhalation.

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