Tracheostomy Care

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What is a tracheostomy?

- Surgical incision in the trachea
- Opening is called a stoma
- Tube is inserted to allow air to flow in and out of lungs

- Tracheostomy tube acts as airway
- Tracheostomy tube must be clear of secretions
- Tracheostomy tube is approximately size of individual’s little finger
Reasons for Tracheostomy

- Structural/muscular abnormalities in airway
- Apnea (no breathing) or pauses in breathing
- Abnormal growth in airway that interferes with breathing
- Injury or burn to the head/neck that cause airway to swell
Types of Tracheostomy Tubes

- Uncuffed, single cannula (most common)
- Uncuffed, double cannula
- Cuffed, single cannula
- Cuffed, double cannula
Additional Pieces to Trach

- **artificial nose** helps:
  - Hold your child’s own warmth and moisture in the airway.
  - Filter small objects from the airway.

- **OBTURATOR**: A guide placed inside the tube when the tube is being inserted. The obturator is removed immediately after the tube is placed.

**Passy-Muir Valve (PMV)**: increases speech production & improves swallowing
Safety Measures

Tracheostomies bypass the body’s normal filtering process:

- Do not use powders or aerosols around child
- Keep small particles such as sand, glitter, lint, chalk away from student’s tracheostomy
- Keep small pieces of food or water away from tracheostomy
- Keep glue or chemicals with strong fumes away from child
Responsibilities of Unlicensed Personnel

1. Suctioning
2. Removal and insertion of tracheostomy tube

Only in cases of emergency - signs of respiratory distress (see next slide)
# Suctioning

## Purpose

- Students with tracheostomies are often unable to cough in order to clear mucous
- If tracheostomy is plugged, student cannot properly breathe
- A plugged tracheostomy tube can be life-threatening
- Suctioning almost always clears tracheostomy tube of secretions
- A catheter that fits into the tracheostomy tube is attached to suction machine to perform suctioning

## Signs & symptoms of respiratory distress

- Grunting, noisy breathing
- Difficulty breathing
- Increased rate of breathing – very fast or very slow
- Pale, blue color around the lips, nails, & eyes
- Flaring nostrils (move in and out when breathing)
- Restlessness
- Sweating or “clammy” skin
- Anxious, frightened look
- Production of large amounts of secretions that are not removed from the trachea by coughing
Suctioning Equipment

- Portable Suction machine
- Suction connection tubing
- Sterile suction catheter
- Gloves
- Water/Saline
- BVM (resuscitation bag)
Position for suctioning, tube removal, & insertion
Steps for suctioning

- Wash hands
- Put on gloves
- Use one gloved hand to hold suction end of catheter & protect catheter from touching anything
- Attach catheter to suction machine
- If child has artificial nose or Passy Muir, hold outer cannula and remove artificial nose/Passy Muir
- Gently insert catheter into tracheostomy to specified depth indicated
- Cover thumbhole on catheter to apply suction
- Gently twist the catheter as it is being removed
- Remember child is not getting oxygen during suctioning. *Complete procedure should be < 5 seconds!*
- Discard suction catheter & gloves
- Wash hands
Suctioning
Suction depth

- Pre-measured technique for routine suctioning based on school nurse assessment
- Pre-marked catheters
- Deep technique increases risk of epithelial damage
- Only twist catheter during removal. Never twist catheter during insertion.
- Do not insert suction catheter beyond the tip of the tracheostomy tube.
Emergency Trach Tube Removal

- If suctioning fails to remove “plug” in tube call 911
- Roll a towel or blanket under child’s shoulders so head is tilted slightly back or position per careplan
- Put on gloves
- Open new tube & insert obturator into new tube
- Lubricate the end of the new tube with water-soluble lubricant/sterile water if provided
- A partner may have to restrain child’s arms while tube is removed
- Gently remove old tube (deflate cuff if applicable)
Emergency Trach Tube Insertion

- Gently insert new tracheostomy tube
- Quickly remove obturator, while holding outer edges of tube wings to prevent decannulation (inflate cuff if applicable)
- Suction if indicated
- Continue to monitor child’s breathing
- Secure tracheostomy tube with tracheostomy ties or hold tube in place until 911 arrives
- Remove gloves
CPR with Tracheostomy: Unconscious Student

- Call 911
- Put on gloves
- Begin with Chest Compressions (30:2)
- Remove tracheostomy tube
- Pulmonary resuscitation with mouth to mouth
  - Pinch nose, cover stoma with gloved finger and proceed to ventilate using a barrier device
- Pulmonary resuscitation with mouth to stoma
  - Close mouth, pinch nose, and then proceed to ventilate using a barrier device
- BVM (licensed nurse only); if unable to ventilate follow above protocol
References


Koziol, Cindy. Personal interview on September 21, 2009

References


