PROCEDURE

SUBJECT: Tracheostomy Tube Weaning

Business: Madonna Rehabilitation Hospital - Lincoln
Date of Origin: 10/27/2015
System: Patient Care
Number: 197
Department: Respiratory Therapy
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PROCEDURE:

Purpose: To establish a standardized method of trach tube weaning with the goal of tracheostomy tube decannulation.

Prerequisite: Physician order to initiate Passy Muir Valve (PMV®) and tracheostomy tube cap.

Absolute Contraindications: Severe upper airway obstruction, medical instability, foam-cuffed trach tube.

Relative Contraindications: Severe aspiration risk, thick, excessive or otherwise unmanageable secretions.

Infection Prevention: Gloves, masks and protective eyewear will be used with all open-trach procedures.

Patient Safety:

a. All staff caring for a patient using a PMV must be trained appropriately, e.g. recognizing signs and symptoms of increased work of breathing (WOB) and/or respiratory distress and the appropriate response (determined by staff's clinical scope of practice)
b. Place pilot balloon safety label as provided in the package. Additional bedside labels are available within the package and highly encouraged.
c. Trach tube cuff must remain completely deflated with the PMV in place.
d. After the initial RT/SLP assessment, the SLP may deflate the tracheostomy tube cuff in non-ventilator patients for the PMV trial in absence of the RT if the SLP has had the training and completed the competency check offs on lung sounds, sterile suction, and cuff deflation/inflation. SLP may also inflate the cuff if needed post PMV

removal due to “STOP” criteria, physician ordered, and/or need for manual resuscitation.

SECTION A: INITIAL PMV ASSESSMENT/TRIAL
SECTION B: ADVANCING PMV USAGE
SECTION C: PROBLEM SOLVING
SECTION D: TRACH CAP TRIALS

SECTION A: Initial PMV Assessment/Trial

- Performed together by RT and SLP within the first 48 hours of admission
- Review of patient’s medical history and admitting diagnosis
- Patient history of aspiration will require SLP to evaluate
- Position patient upright or semi-fowler position, note level of consciousness and/or additional factors that may interfere with patient’s respiratory drive.
- RT will assess breath sounds and tracheal/oral suction as needed.
- RT will slowly deflate trach cuff and assess for signs and symptoms of respiratory distress/insufficiency.
- RT will re-inflate trach cuff to minimal leak technique (MLT) in the presence of respiratory distress, respiratory insufficiency and/or “STOP” Criteria.

“STOP” Criteria Sustained: • HR ↑ > 20 beats/min • RR > 35 breaths/min • FiO2 ≥ 60% to maintain SpO2 > 90% • RPD > 6 (Rating of Perceived Dyspnea)

- SLP will assess glottal patency by looking for signs that the patient is exhaling adequately through the upper airway. These could include observing the patient coughing, vocalizations, reflexive oral movements, throat clearing, or feeling the flow of air on the hand held at the patient’s mouth and/or nose.
- RT will place PMV on trach
    - RT will continue to monitor patient’s status

    - SLP will continue assessment of glottal patency, phonation and coordination of speech and breathing
- Trach cuff may remain deflated in the absence of "STOP" Criteria unless otherwise contraindicated or ordered by physician

SECTION B: Advancing PMV Use

- As indicated, continue to increase patient's use of the PMV™ with physician order as long as initial RT/SLP trial is tolerated.
- Continue to monitor patient's status noting any signs and symptoms of respiratory insufficiency, "STOP" Criteria or gross aspiration.
- After the initial RT/SLP assessment, the SLP may deflate the tracheostomy tube cuff in non-ventilator patients for the PMV trial in absence of the RT if the SLP has had the training and completed the competency check offs on lung sounds, sterile suction, and cuff deflation/inflation. SLP may also inflate the cuff if needed post PMV removal due to "STOP" criteria, physician ordered, and/or need for manual resuscitation.

SECTION C: Problem Solving: if a patient is unable wear the PMV without signs/symptoms of respiratory distress consider a tracheostomy tube change with the following in mind:

- There are multiple choices of trach tubes and trach tube cuffs. When changing size/type of trach tubes consider inner diameter (I.D.), outer diameter (O.D.) and length.
- Unless a patient's secretions are copious and/or tenacious, consider the use of a single cannula trach tube to decrease airway resistance on inhalation.
- Consider the use of a trach tube cuff that will "hug" the body of the trach when deflated (e.g. Bivona TTS), to maximize the space needed for exhalation around the trach through the upper airway.
- Avoid "downsizing" by more than 1 trach size at a time to allow proper closing of stoma around the new tube and to avoid unwanted leakage around the stoma
- Maintain appropriate inner diameter for potential bronchoscopy and/or the need for mechanical ventilation

SECTION D: Trach Cap Trials

Patients appropriate for Trach Cap trials include: non-ventilator dependent patients and patients requiring nocturnal and/or PRN mechanical ventilation that have met all previously noted criteria. Once a physician order is obtained for trach capping:

- RT will deflate trach cuff and apply trach cap. Patient's tolerance of the trach cap will be measured using the same "STOP" criteria used for the PMV.
- RT may request physician order to decannulate once tolerance of the trach cap is achieved
- Physician order is required prior to trach decannulation.

Patients that do not tolerate the use of a trach cap may require additional "downsizing" of tracheostomy tube. A cuffless trach may be considered at this time. All aspects of a trach tube (I.D., O.D. and length) must be considered when selecting a new trach tube.

Patients requiring frequent removal of trach cap for tracheal suction or other airway interventions may not be candidates for decannulation until such interventions are no longer necessary. May consider a stoma stent.

"STOP Criteria"

Sustained:

- HR↑ > 20 beats/min
- RR > 35 breaths/min
- FiO2 ≥ 60% to keep SpO2 > 90%
- RPD > 6 (Rating of Perceived Dyspnea)

SIGNATURES:

Author:

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Title	Signature	Date