

Title:	Tracheostomy Tube Weaning		
Chapter / Department:	Respiratory Therapy		
Policy Number:		Original Effective Date:	04/01/2017
Current Effective Date:	04/2017	Review /Revision Date:	04/2017

PROCEDURE:

Purpose: To establish a standardized method for the evaluation and safe weaning of tracheostomy tube support.

Prerequisite: Physician order to initiate Trach Wean Protocol.

Contraindications: Severe upper airway obstruction, severe aspiration risk, 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.

- I. Initial Assessment:** Performed by Licensed Respiratory Care Practitioner (LRCP) and Speech Language Pathologist (SLP).
 - a. Review of patient’s admitting diagnosis and medical history.
 - b. Patient history of aspiration will require Speech Language Pathologist to determine next step.

- II. Initial Evaluation Performed by LRCP and SLP**
 - a. Note patient position, level of consciousness or additional factors that may interfere with patient’s respiratory drive.
 - b. LRCP will assess breath sounds and suction above and below trach cuff as indicated.
 - c. LRCP will slowly deflate trach cuff and assess for signs and symptoms or respiratory insufficiency.

- d. LRCP will re-inflate trach cuff if "STOP" criteria or respiratory insufficiency noted.
- e. SLP will assess glottal patency.
- f. LRCP/SLP will place on-way –valve on trach
 - i. LRCP will continue to monitor patient's tolerance
 - ii. SLP continues assessment of glottal patency, phonation and coordination of speech and breathing.
 - iii. Trach cuff may remain deflated day and night in the absence of "STOP" criteria. NOTE: Head of bed must be kept at or greater than 30 degrees with trach cuff deflation unless medically contraindicated.

"STOP" CRITERIA

- HR increased by >20bpm
- RR>35
- SpO₂<90%
- FiO₂≥60%
- RPD>6

III. If indicated, advance patient to "One-Way-Valve as Tolerates"

- a. Increase One-Way-Valve use throughout day and evening hours.
- b. Continue to monitor patient for "STOP" Criteria.
- c. Once patient can successfully wear One-Way-Valve throughout all waking hours without any STOP criteria present, LRCP may initiate Trach Cap Trials for non-ventilator dependent patients.

IV. If patient does not tolerate previous step, assess patient for trach downsize.

- a. Unless a patients secretions are copious and or tenacious, consider use of single cannula trach.
- b. Maintain appropriate cannula length.
- c. Avoid downsizing by more than 1 trach size at a time to allow proper closing of stoma around new tube.
- d. Maintain appropriate inner diameter for potential bronchoscopy and ventilator patients.
- e. Exercise caution when considering TTS, or other trach utilizing sterile water-inflated cuffs for ventilator patients. These trachs may make it difficult to maintain a proper seal, resulting in air leakage around stoma.

V. Trach Cap Trials

- a. Patients appropriate for Trach Cap Trials include: non-ventilator dependent patients and patients requiring nocturnal ventilation and/or PRN mechanical ventilation that have met all previously noted criteria.

- b. LRCP will deflate trach cuff and apply trach cap. Patient's tolerance of trach cap will be measured by the same criteria used for One-Way-Valve Trials.
- c. Patient will then use trach cap as tolerated until able to wear trach cap continuously for a minimum of 48 hours.
- d. Physician order is required prior to decannulization.

VI. Patients not tolerating Trach Cap Trials:

- a. Patients may require additional down-sizing of tracheostomy tube. Cuffless trachs or TTS trachs may also be appropriate at this time. All dimensions of the trach tube, inner diameter, outer diameter and length, must be considered before selecting the proper trach.
- b. Patients requiring frequent removal of trach cap for tracheal suction or other airway intervention may not be candidate for decannulization until such intervention is no longer necessary.

VII. Trach Buttons

- a. A trach button may be used to maintain an open stoma. Trach Buttons can be considered for patients that may need tracheostomy reinserted in an emergency, may require repeated tracheostomies or require additional evaluation for ability to cough and clear secretions. A physician order is required prior to trach button insertion.

Reference: Madonna Rehabilitation Hospital
American Speech and Hearing Association