

## **TRACHEOSTOMY WEANING AND DECANNULATION PROTOCOL**

### **I. PURPOSE**

This protocol outlines the process for the safe and effective weaning of a patient from a tracheostomy tube in order to facilitate decannulation.

**Who May Perform:** Interdisciplinary; with Respiratory Care Services, Nursing, and Speech Pathology, in conjunction with physician participation and a protocol-guided order set.

### **II. SUPPORTIVE INFORMATION**

A. To implement this guideline, the patient must be medically stable and meet the minimal criteria:

1. Five to seven days postoperative, to ensure a mature stoma, following a temporary tracheostomy.
2. No acute respiratory problems (such as pneumonia, shortness of breath, respiratory insufficiency)
3. Minimal secretions (suctioning less than every 4-6 hours) with a strong cough reflex sufficient to clear secretions
4. Oxygen saturation in range ordered by MD
5. Not on mechanical ventilation
6. No anatomical upper airway obstruction or limitation

B. Patient population:

Postoperative temporary tracheostomy patients may be candidates for this protocol. Permanent tracheostomy (e.g. total laryngectomy) patients, or those managed by the ENT service, are not probable candidates for this protocol.

C. Protocol initiation:

Patients meeting the above criteria can be initiated into the protocol with a physician order for the Tracheostomy Weaning Protocol in the LastWord POE system. Upon an initial successful tracheostomy tube cuff deflation procedure, patients will proceed to a “Fast Track” pathway (see algorithm). The physician will be contacted in the event that the initial cuff deflation procedure is unsuccessful.

### **III. FAST TRACK PATHWAY**

1. Following successful initial tracheostomy tube cuff deflation, the tracheostomy tube will then be changed to a cuffless and/or smaller size to begin plugging trials

*NOTE: The initial tracheostomy tube change must be performed by a physician, or by a Respiratory Care Practitioner with a specific physician order.*

Cuffless tracheostomy tubes are recommended for plugging trials to decrease risk of mucus collection and to facilitate airflow. Subsequent tracheostomy tube changes may be performed by a Respiratory Care Practitioner, per protocol.

2. A plugging trial will begin following the tracheostomy tube change. During the plugging trial period, patients will be monitored with continuous pulse oximetry (Oxinet III central monitor), and every two hours by an RCP, for 24-48 hours per physician order.

3. The physician will be contacted at the successful completion of the plugging trial, or in the event that the trial is terminated secondary to patient compromise.

### **IV. EXTENDED PATHWAY**

In the event of an unsuccessful plugging trial, the physician will be contacted to establish an extended tracheostomy-weaning plan. An integral component of the extended tracheostomy-weaning pathway includes a Speech Pathology referral for monitored speaking valve trials.

Extended tracheostomy physician-directed options for individual patients may include:

- Speaking valve (Passy-Muir) trials in conjunction with Speech Pathology
- Tracheostomy tube change to a fenestrated uncuffed tube to facilitate speaking valve trials.
- Recommendation for ENT or Pulmonary Medicine consults in the event of recurring trial failures.

### **V. DECANNULATION**

For patients who effectively mobilize secretions without the need for suctioning for 24 hours, and successful completion of trach plugging for 24-48 hours, the RCP may remove the tracheostomy tube following consultation and a specific order by the responsible physician.

### **VI. DOCUMENTATION**

Documentation will take place in CliniVision (Respiratory Care Services) and LastWord. The IPOC module in LastWord will serve as a multidisciplinary reference for individual patient progress within the protocol pathway. CliniVision, specific to Respiratory Care Services, will provide a database for outcomes reporting.

# TRACHEOSTOMY WEANING AND DECANNULATION ALGORITHM

