

Title:	Speaking Valve with & without Ventilation	Policy #:	142-21-004.3
Effective Date:	November 1997	Department: Category:	Speech Therapy Patient Care and Assessment
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Purpose

To ensure proper and safe procedure is used when utilizing a Speaking Valve, such as a Passy-Muir Valve (PMV). A Tracheostomy Speaking Valve is designed to eliminate the necessity of finger occlusion for the patient with tracheostomy tube. It consists of a one-way valve that opens during inspiration, allowing air to enter the lungs. During expiration the valve remains closed, thus redirecting air into the trachea and up through the vocal cords, creating phonation. The speaking valve improves quality of life of patients by allowing them to verbally communicate their wants/needs.

Policy

The Speaking Valve is a piece of equipment used for the above purpose as appropriate on patients that do not present with contraindications. A physician's order is required. These services are provided jointly by the Respiratory Therapists (RT) and Speech-Language Pathologists (SLP). The SLP and RT will provide safe assessment, application and instruction in the use of the device.

Patient Population

- A. All adults and geriatric inpatients who are tracheostomized and/or on mechanical ventilation.
- B. Patients who are alert, responsive and able to make basic attempts at communication.
- C. Patients who are able to tolerate cuff deflation without risk of gross aspiration of secretions (per assessment by SLP)

Generally medically stable patients

Precautions

- A. Do not use with inflated cuffs and or Bivona Foam Tracheostomy tubes.
- B. Do not use in patients with copious secretions.
- C. Do not use in patients with severe tracheal stenosis.

- D. Do not use on patients on assist control unless (AC) ordered by a physician. Observe patient for adequate ventilation after initial placement. Remove speaking valve during administration of aerosol treatments.
- E. Do not use on patients discharged from weaning protocol unless ordered by a physician.

Procedure

A. Non-Ventilator Dependent Patient

1. Verify physician's order.
2. Obtain pre-packaged sterile speaking valve, such as the PMV.
3. Wash hands.
4. Introduce self and identify patient.
5. Explain procedure to be performed.
6. Perform tracheal suction if necessary.
7. If cuffed tracheostomy tube in use, ensure cuff is deflated. If trach is fenestrated, remove inner cannula.
8. Attach a warning label to pilot balloon and patient's headboard.
9. Attach Speaking Valve to tracheostomy tube.
10. Observe patient for adequate ventilation, via pulse oximetry to assure O₂ sats stay within 5% of patient's baseline O₂ sats and above 90%.
11. Encourage vocalization by asking patient to speak.
12. Monitor patient during assessment and treatment.
13. Remove valve and re-inflate cuff if previously inflated.
14. Wash hands.
15. Document progress in patient medical record.

B. Ventilator Dependent Patients

1. Follow steps 1 thru 6.
 - a. Additional oral/tracheal suctioning may be required once cuff is fully deflated.
2. Zero out the Positive End Expiratory Pressure (PEEP)
3. Note the Peak Inspiratory Pressure (PIP) with the tracheal cuff inflated (pre-cuff PIP)
4. Slowly deflate cuff of Tracheostomy tube.
5. Note PIP with cuff deflated (post -cuff PIP)
6. Compare pre-cuff deflation PIP and post-cuff deflation PIP. Post-cuff PIP should decrease because of the leak created.
7. Attach Speaking Valve to tracheostomy tube with an appropriate adapter.
8. Attach one end of six-inch flex tube to Speaking and other end to ventilator circuit.
9. Increase Vt incrementally to equal pre PIP. If patient is on CPAP or SIMV, pressure support may need to be adjusted to maintain adequate spontaneous tidal volume or pt comfort.

10. Observe patient closely for any signs of respiratory distress.
11. Upon completion of evaluation or trial, remove the PMV and the adapter. Inflate cuff and reset ventilator to pre-valve settings.
12. Ensure patient's comfort.
13. Document progress in patient medical record.

C. PMV Reassessment

1. If a patient is unable to tolerate PMV, consider trach tube downsize
2. Request ENT Consultation regarding possible airway problems

D. Cleaning

1. Follow manufacturer's guidelines for cleaning
2. **NOTE: NEVER USE HOT WATER, ALCOHOL, PEROXIDE, BLEACH OR CIDEX TO CLEAN VALVES.**