

Clinical Procedure

In-Line Passy Muir Valve

Policy

Patients will be evaluated for a Passy Muir Valve in-line with the ventilator with a Physician's order by a Respiratory Therapist and/or Speech Therapist to determine if a patient is a candidate for the therapy.

Procedure

Contraindications:

1. Severe medical instability.
2. Severe risk for gross aspiration
3. Inability to tolerate cuff deflation
4. Foam-filled cuff (Bivona Trach)
5. Severe stenosis/airway obstruction
6. Thick and copious secretions
7. Tracheal edema

Assessment Criteria for Use of the Passy Muir Valve:

1. Medically stable
2. Ability to tolerate cuff deflation
3. Airway patency
4. Bedside assessment of cuff deflation
5. Lung compliance

General Patient Information will be completed before proceeding to the actual procedure and will include:

1. Primary Diagnosis
2. Airway History
3. Date of Tracheostomy/Type/Size: Original date of surgery with type and size of tracheostomy placed; include any changes in tracheostomy with date of most recent change out.

The following will be documented by the Respiratory Therapist and/or Speech Therapist

- A. Bedside Assessment will be completed prior to PMV placement and will include:
 - a. **Vital Signs:** To include Pre and Post HR, RR, SpO₂ and may also include BP.
 - b. **Secretions:** Amount, Consistency and Color
 - c. **Vent Settings:** To include Mode, Tidal Volume, Respiratory Rate, Pressure Support, PEEP, and FiO₂.
 - d. **Weaning:** To include the patient's current weaning schedule with the date order written and how patient is tolerating
 - e. **Air flow/Cuff Leak:** When the cuff is fully deflated, note tidal volume leaking around the cuff.
- B. PMV Placement Data will be completed after procedure and includes:
 - a. Date and time of procedure:
 - b. Toleration of the procedure
 - c. Use of accessory muscles present
 - d. Ability to clear secretions
 - e. Cough
 - f. Vocal Intensity (Speech Only)
 - g. Voice Quality (Speech Only)
 - h. Presence of Anxiety
 - j. Indicate follow-up need and recommendations on usage.

Procedure

Note: PMV cannot be used with foam cuff tracheostomy tubes (Bivona, etc.)

1. Obtain baseline vital signs, reassess throughout trial.
2. Explain procedure to patient
3. Position patient comfortably
4. Suction tracheostomy tube and oral cavity
5. Turn PEEP off.
6. Turn Low minute volume alarm off.
7. Prior to cuff deflation, exhaled volumes and peak inspiratory pressures (PIP) should be noted and then compared to measurements post cuff deflation. This is necessary to determine approximate inspiratory volume losses to the patient.
8. Deflate the cuff completely slowly and listen for tracheal leak.
9. Place the PMV inline and monitor patient chest rising and PIP.
10. Volume adjustments need to be made to match baseline peak pressure, usually 100-200 ml increase.

11. Set Low pressure alarm 5 below PIP and high pressure 10 above PIP. (Low pressure is the only disconnect alarm on the ventilator).
12. Document PMV placement and perform a ventilator check.

Note: Patients should not wear PMV through the night.

PMV Re-assessment: If patient is unable to use the PMV, notify the physician for further orders.

Questions

Submit questions or requests for additional information to your Manager of Clinical Operations or call the Ask Us 1st line at 1-800-ASKKUS-1.