



Clinical Complications of Tracheostomy

Complications of an Inflated Cuff

- An inflated cuff can cause necrosis and trauma to the tracheal wall
- Laryngeal anchoring may interfere with epiglottic inversion and airway protection during swallow
- Reduced airflow to upper airway:
 - Reduces sensation
 - Affects vocal fold closure
 - Reduces smell and taste
 - Results in loss of voice
- Reduced subglottic pressure may negatively affect:
 - Swallowing
 - Coughing
 - Generating Physiologic PEEP
 - Breath holding



Clinical Benefits of the Passy-Muir[®] Valve

Clinical Benefits

- Improves speech production
- Improves swallowing and may reduce aspiration
- Restores natural positive airway pressure
- Facilitates secretion management
- Improves oxygenation
- Expedites ventilator weaning and decannulation
- Facilitates infection control
- Improves smell, taste and sensation
- Facilitates pediatric speech/language development



Quick Tips for Assessment & Placement

Proper airway assessment, patient education, appropriate therapy and multidisciplinary team approach are keys to successful Passy-Muir[®] Valve application.

Patient Selection

- Alert, oriented and attempting to communicate
- Medically stable
- Able to tolerate cuff deflation
- Able to manage secretions
- Patent upper airway

Airway Assessment

- Achieve full cuff deflation
- Occlude tube with gloved finger on exhalation
- Ask patient to voice or cough

Passy-Muir[®] Valve Placement

- Fits on universal 15mm hub of tracheostomy tubes
- Apply with quarter turn clockwise
- Monitor vital signs and work of breathing
- Increase wearing time as tolerated
- May use with humidity (non-medicated heated aerosol)
- Remove valve for medicated aerosol treatment



Quick Tips for Assessment & Treatment

Factors Which May Affect Upper Airway Patency

- Trach tube size or type
- Upper airway obstruction
- Incomplete cuff deflation
- Edema
- Foam-filled cuff
(absolute contraindication)
- Secretions
- Tracheal Stenosis

Assessment and Treatment of Common Issues

Inadequate exhalation or breath stacking

- Check for complete cuff deflation
- Suction trach tube and/or oropharynx
- Reposition patient and/or trach tube
- Retrain for normal breathing patterns
- Assess need for downsizing trach tube
- Consider direct visual assessment for airway obstruction

Coughing

- Allow patient time to move secretions
- Suction patient if needed
- For persistent or dry cough remove valve and reassess

Anxiety and/or Depression

- Use oral exhalation exercises
- Solicit family involvement
- Educate and use relaxation techniques
- Consult recreational and psychological therapies

Weak voice

- Glottic closure exercises
- Diaphragmatic breathing exercises
- Expiratory muscle strength training

Therapy Techniques

Activities to Encourage Oral Exhalation

- Bubbles
- Whistles
- Horns
- Kazoos
- Pinwheels
- Straws
- Cotton balls
- Expiratory muscle strength training exercises



Activities to Encourage Voicing and Speech

- Singing
- Humming
- Counting
- Talking on the phone
- Prolonging vowels

Education & Clinical Support



Speech and Respiratory
Clinical Specialists are
available to answer your
questions

1-800-634-5397



Email your
questions

info@passy-muir.com

Educational Presentations



Live Presentations

- Facility Locations
- State and National Conferences
- Society Meetings
- Seminars
- Colleges and Universities



Webinars

- Live Special Events Webinars
- Self-Study Webinars
- Free CEUs
- Free Clinical Resources

www.passy-muir.com

