

Blom® Speaking Valve on Mechanically Clinical Experiences With Ventilated Patients in a NeuroIntensive Care Unit

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UF Health Demographics

- Private, non-for-profit comprehensive academic health care center located in Gainesville Florida
- Tertiary and quaternary care center
- 1111 licensed beds
- 11 total critical care units



Introduction

- Verbal impairments
- Currently, the BLOM® speaking valve (SV) is the only approved product available that allows phonation in ventilator-dependent patients with tracheostomy.
- Current standard of care



Methods

- Retrospective evaluation of clinical outcomes
- Baseline criteria abstracted into survey results



Exclusion Criteria

The BLOM Trach was not used on patients with the following criteria:

- Age less than 21
- Weight less than 30 kg
- Need for specialty trach (XLT) and/or critical airway
- Upper airway obstruction (ruled out with endoscopy), upper airway pathology



Exclusion Criteria Cont.

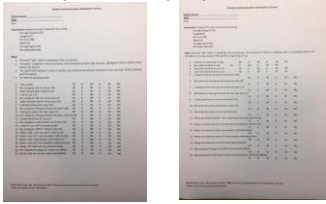
- Bilateral vocal cord paralysis
- Total laryngectomy
- Excessively dilated stoma
- Frequent suctioning requirement
- greater than or equal to 5x/hr, copious or tenacious secretions
- PEEP setting greater than 10 cmH2O



Measurement Tools

Patient & Family Satisfaction Survey

- Validated tool
- Completed one per patient



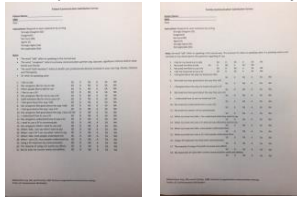
Adapted from Culp, DM, and M Carlisle, 1988. Partners in augmentative Communication training. Tucson, AZ: Communication Skill Builders.



Measurement Tools

Staff Satisfaction Survey

- Validated tool
- One completed on first trial each by MD, RN, RT and ST



Adapted from Culp, DM, and M Carlisle, 1988. Partners in augmentative Communication training. Tucson, AZ: Communication Skill Builders.



Results

- Trial actually took 2 years to complete with 28 patients recommended for BLOM
- 23 patients had BLOM trach placed
- 22 patients received speaking valve trials
- Anticipated time frame for trial was to be 3-6 months and 60 patients; confined to the NeuroICU.

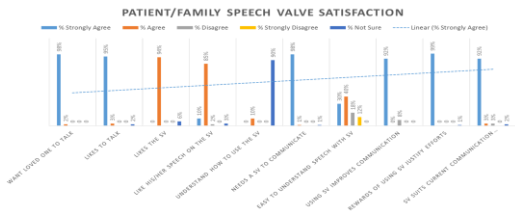


Results

Patient Population Enrolled	Speech Trial Results (N =185)
Stroke = 15	28% (52) optimal/completed (30+ minutes)
Cervical spine fracture = 4	36% (68) suboptimal/completed (0-29 minutes)
Guillian-Barré = 3	14% (27) unable to complete/aborted
Other (TBI) =1	***Speech trial times varied in duration.



Results



Conclusion

- Impaired communication during MV is suboptimal for neurocritical care patients.
- Clinical experiences showed positive and negative outcomes.
- Unanticipated obstacles
- Further study is needed to determine efficacy in this population.



References

- Culp, DM, and M Carlisle, 1988. Partners in augmentative Communication training. Tuscon, AZ: Communication Skill Builders.
- Kunduck, M. et al (2010). Preliminary report of laryngeal phonation during mechanical ventilation via a new cuffed tracheostomy tube. *Respiratory Care*; 55 (12) 1661-1670.
- Leder, S. et al (2013). Verbal communication for the ventilator-dependent patient requiring an inflated tracheotomy tube cuff: A prospective, multicenter study on the BLOM tracheotomy tube with speech inner cannula. *Head & Neck*. DOI10.1002/hed.22990.