Alan H Shikani, J Speech Pathol Ther 2017, 2:3,(Suppl)
http://dx.doi.org/10.4172/2472-5005-C1-002

International Conference on
Speech Language Pathology
May 22-23, 2017 Las Vegas, USA

Assessment and comparison of the different tracheotomy speaking valves

Alan H Shikani[1, 2]
[1]Sinai Hospital, USA
[2]MedStar Union Memorial Hospital, USA

Tracheotomy affects the patient at a very basic level: The ability to communicate. One-way speaking valves are designed to direct exhaled air over the vocal folds and restore speech. A variety of speaking valves has been described in the literature; the most commonly used being the Passy-Muir valve and the Shiley Phonate valves, which are flapper type valves. A newer type of unidirectional speaking valve, the Shikani Ball valve is based on a moving ball inside a chamber. Upon inspiration, the ball moves further back and air enters the trachea. On exhalation, the ball is flipped forward and seats into the valve opening, hence forcing the air to flow through the larynx and allowing speech. One advantage of the Shikani ball valve over the Passy-Muir or Shiley flapper valves speaking valves is that it offers substantially lower airflow resistance. The resistance inherent to the flapper valves may affect patient tolerance of the valves, thereby directly affecting both patient and valve selection. Hyposmia is a well-recognized phenomenon in patients who have had their nasal airflow diverted through a tracheotomy, believed to be due to elevated olfactory detection thresholds. The redirection in airflow that occurs with the use of a speaking valve has been theorized to be the cause of smell improvement. This study shows that the Shikani Ball valve significantly improves the loss of smell, as compared to the Shiley or the Passy Muir valves. Acoustic and perceptual evaluation was also generally more favorable with the Ball valve, most significantly with regards to speech naturalness. We did not note any significant difference in oxygen saturation levels. Eight out of 10 subjects subjectively preferred the ball valve, especially with regards to its low profile and ease of breathing and two preferred the Passy Muir valve.

Biography

Alan H Shikani did his Residency and Fellowship training in Otolaryngology-Head & Neck Surgery at the Johns Hopkins Hospital in Baltimore and is currently the Chief of Otolaryngology-Head & Neck Surgery at the LifeBridge Sinai Hospital and MedStar Union Memorial Hospital. He is also an active Member of many distinguished societies including the Alpha Omega Honor Medical Society, the Triologic Society, the American College of Surgeons, the American Academy of Otolaryngology and the American Rhinologic Society. He has published numerous articles and book chapters in the field of otolaryngology-head & neck surgery. He is the Inventor of the Shikani speaking valve and Shikani HME and the Founder of the Airway Company.

ashikani@gmail.com

Notes: