Modified Valsalva Maneuver

Team Leader: Barbara Merutka BSN RN CMSRN CAPA
The University of Texas MD Anderson Cancer Center, Houston, Texas
Team Members: Staci Eguia MSN RN CCRN, Kimberly Potts MSN RN CNOR

Background Information: Supraventricular tachycardia (SVT), can present in the perioperative setting and standard conversion methods have shown underwhelming responses for success. The Randomized Evaluation of modified Valsalva Effectiveness in Re entrant Tachycardias (REVERT) trial, conducted in 2015, showcases modified Valsalva maneuver as an alternative to traditional Valsalva maneuver that offers improved conversion rates to sinus rhythm and is highly tolerated by patients.

Objectives of Project: Although successful, the REVERT trial and modified Valsalva maneuver are not vastly discussed and known in nursing practice. The objective of this project was to gauge perioperative staff baseline knowledge of traditional vs. modified Valsalva maneuver, educate perioperative staff on the REVERT trial and how the modified Valsalva maneuver differs from traditional Valsalva, and encourage confidence in understanding and practice utilization.

Process of Implementation: Review of the REVERT trial was conducted for validity and pertinence to practice. A needs assessment was created and conducted, and knowledge deficits were identified. An educational in-service was provided to all appropriate clinical staff and questions were answered. A post-education survey was conducted two weeks later to assess knowledge retention. Review of the initial survey data showed room for improvement in staff knowledge, so additional learning styles were included for reeducation. A final survey was conducted two weeks post reeducation to assess knowledge retention and understanding.

Statement of Successful Practice: The pre survey assessment indicated 17% of staff had heard of modified Valsalva maneuver. Post implementation of initial education, 55% of staff were able to correctly identify the difference between traditional Valsalva and modified Valsalva and 94% of the staff felt encouraged to consider modified Valsalva maneuver in practice. Post implementation of reeducation, 100% of staff were able to correctly identify the difference between traditional Valsalva and modified Valsalva and 100% of the staff felt encouraged to consider modified Valsalva maneuver in practice.

Implications for Advancing the Practice of Perianesthesia Nursing: Providing education for alternatives to traditional considerations in treating SVT increases awareness for new knowledge to clinical staff and could improve patient outcomes and satisfaction.