Evidence Based Practice for Tracheostomy Care

A Nursing and Therapies Research Council Review of Literature

NTRC Members, CoxHealth, Springfield, Missouri

Background

The Nursing and Therapies Research Council (NTRC) is a CoxHealth specific council founded in 2016. The committee’s purpose is “To better patient outcomes and experiences as a whole by our impact on nursing and therapy practice, education, and research via our own conduit of research, providing assistance to other nurses and therapists interested in research, and disseminating our findings.”

On 9/21/2017 the Nursing Practice Council came forward with an inquiry in an attempt to clarify the best practice for tracheostomy care.

Problem

The practices for tracheostomy care, especially specific to the inner cannula cleaning, tends to differ facility to facility. A practice resource known as “Lippincott Procedures” was not concurrent with CoxHealth specific policy/procedures. This left the Nursing Practice Council wondering if our CoxHealth policy/procedure was still adhering to best practice.

Inquiry Question

What is the best way to perform trach inner cannula cleaning?

Literature Search Summary

- EBSCO host was used in this ROL with CINHAL, Medline, and The Cochrane Database of Systematic Reviews. Key terms of “Tracheostomy” and “Tracheostomy Care” were used.
- The NTRC reviewed 16 articles and references in regards to tracheostomy inner cannula cleaning. They were all distributed among NTRC members and discussed via email. Results are included on this poster.
- It should also be noted that several different institutions and disciplines were contacted in this endeavor. All results are included.

Additional References (not in literature)

- Personal accounts from Respiratory Therapists
- Personal accounts from RNs on 3W
- Personal account from Missouri State University’s Department of Nursing
- Personal account from Executive Director of Care Coordination at Oxford Healthcare
- Personal account from multiple Directors of Nursing

Manufacturer guidelines. Excerpt below taken from a #6 Shiley uncuffed non-disposable trachostomy kit:

- It’s from strong roots that our practice is
- Join the NTRC to become a part of the “how”

ROL Results

Search Summary:

- Based upon the literature the NTRC can state that the research suggests no solid finding for inner cannula trach cleaning.
- Of all 16 references the largest number of agreeing references was only 4 (recommended warm tap water and mild soap). The recommendations from the articles were so vast, they have been placed in graph form (left).
- It should be noted that a common tracheostomy manufacturer, Shiley™, recommends cleaning with “½ strength peroxide, sterile NS, or water and mild detergent”, then rinsing with sterile saline and air drying.
- Multiple disciplines and clusters were contacted in regards to this procedure. Their current practice and well as detailed literature review of these results are listed in the formal NTRC inquiry report.

Results:

- No solid finding for inner cannula trach cleaning
- Multiple cleaning options but with no guidelines for implementation
- Manufacturer guidelines
- Other nursing reports

Recommendations/Implications

- Although research results were vast, it should be noted that the use of “acetic acid” was upheld in none of the articles reviewed. It is recommended that this practice be abandoned.
- Although the literature gives several options, it should be noted that manufacturer guidelines should always be followed

Outcomes

- The results of this ROL were presented to the Nursing Best Practice Council in September of 2017.
- In early 2018, the nursing procedure was updated. It abandoned acetic acid and Hydrogen Peroxide use and replaced these practices with Sterile Normal Saline.

Acknowledgements

- The NTRC and all of its members are acknowledged for the hard work and dedication to finding the evidence to support our practice
- The Nursing Best Practice Council is acknowledged for their hard work in both reviewing the data compiled by the NTRC and taking the necessary steps to implement a change founded in evidence.

References