

Normal Saline Instillation Before Endotracheal Suctioning
Niloufar Hadidi, APRN, BC, MS, CNS, nhadidi1@fairview.org
University of Minnesota Medical Center

Problem: Is the practice of normal saline instillation prior to tracheal suctioning safe in preventing infection and effective in removing secretions?

Evidence: Inconsistency in practice, as well as, controversy in literature.

Strategy:

- A critical review of literature was conducted
- An interdisciplinary group was formed with involvement of cardiopulmonary, inpatient and outpatient representatives.
- Communicated with other institutions in regard to their practice.
- Data on pneumonia rates on patients with Trachea was obtained from Performance Improvement Department.
- Current nursing practice was observed/analyzed by Clinical Nurse Specialist.

Practice Change: Created guideline on Normal saline instillation prior to tracheostomy. Suctioning in collaboration with Department chair of ENT and inpatient/outpatient clinical areas. This led to change in nursing practice, as well as, change in University of Minnesota School of Nursing education on normal saline instillation before suctioning.

Evaluation: Data on pneumonia rates.

Results: Guideline was established, approved by ENT department chair and Nursing Practice Council.

Recommendations: please see next page.

Recommendation for Practice for Adult Med-surg Patients EXCEPT for Head & Neck Cancer & Radiation Patients

1. Saline instillation should not routinely be used but based on need as determined by assessment of patients' response to suctioning.
2. Saline should be used only when it is evident that:
 - Secretions are adhering to the endotracheal tube
 - Mucous is obstructing the airway
 - The suction catheter itself is not eliciting an acceptable cough
 - Catheter does not slide through without lubrication
3. It is important to hyperoxygenate patients before suctioning.

Recommendation for Head & Neck Cancer & Radiation Patients

1. Saline irrigation should be used on a regular basis on cancer and radiation patients, and patients suctioned as needed.
2. Laryngectomy patients need irrigation and not suctioning (unless they have trouble with irrigation and require suctioning).

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