Instilling Normal Saline with Suctioning: Beneficial or Harmful?

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Use of normal saline in suctioning has been an established practice in health care professions for decades. Researchers have found that this practice can cause infection; however, use of normal saline remains common practice among health care providers. The purpose of this EBP project is to compare the effects on respiratory infection rates of normal saline lavage and not using normal saline during suctioning of patients with tracheostomies or endotracheal tubes. A literature review was conducted searching the following databases: CINHAL, Cochrane Library, and JBI CONNECT. Key words searched included tracheostomy, intubation, normal saline, nursing, respiration, and suctioning. Limitors included: English language, research, peer reviewed, and journals. The publications we researched focused on normal saline use in suctioning in patients with endotracheal tubes or tracheostomies. Samples included patients with pulmonary infection who were intubated and mechanically ventilated. Study designs included randomized experimental, controlled trial, blinded outcome, non-experimental survey, post-test only, and retrospective chart review. Overwhelming evidence supports that instillation of normal saline during suctioning may be harmful. Implementing a policy prohibiting the use of saline during suctioning was proposed. Adherence to the policy and nosocomial infection rates of patients requiring suctioning will be monitored for evaluation over six months.

Information about the Authors:
Brent Pavell, Charity Letko, Graciela Olivares, Jenny Luedke, and John Gustavson are senior accelerated nursing students looking forward to graduating in August. They hope to contribute their unique talents to various areas of nursing. Research is an important part of their current studies and will continue to be an essential part of their future nursing careers.

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