

Implementation of Lidocaine for Nasogastric Tube Insertion

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Background

- A literature search revealed safety and efficacy for using Lidocaine for NG tube placement to decrease discomfort. (Mosby Nursing Skills)
- Insertion of an NG tube is uncomfortable and can elicit discomfort.
- Current practice doesn't require an order for an analgesic for NG tube insertion and it isn't typically used.
- All previous studies evaluated showed an increase in number of attempts for ng tube insertion when using lubricant only.
- Additionally the trials showed a decrease in complications of nausea, vomiting, gagging, epistaxis and blood pressure alterations.

PROCEDURE OF IMPLEMENTATION

- Distributed protocol on Mosby's guidelines of NG tube insertion.
- Pre practice change, measured patients pain and anxiety on a scale of 0-10, vital signs prior to & immediately post insertion, number of attempts required for insertion and any complications with insertion to include nose bleeds, gagging.
- RN's will report the ease of placement on a scale of 0-10 scale (0 easy, 10 hardest).
- VUMC Pharmacist will complete nurse teaching on protocol using Afrin and lidocaine pre-NGT insertion.
- Identical measurements will be collected on 30 patients using Afrin & lidocaine with a 16FR NG tube
- RN's will complete pre and post procedure data and patient questionnaires and place it in a locked box located in the charge nurse office

PRELIMINARY RESULTS

- Of 22/30 subjects completed with lubricant only, the average pain and anxiety level was 7/10. The average heart rate pre insertion was 86 and post insertion was 102.
- 17 subjects experienced a gagging and/or choking sensation.
- Several patients report a 9-10 on the pain and anxiety scale with insertion using lubricant only.
- Patients surveyed and of 16 of the most painful procedures they rated NG tube insertion as second, rated only behind arterial blood gasses. 1

OBJECTIVES

- To assess the impact of a practice change (use of lidocaine & Afrin for insertion of NGTs) on patient pain, anxiety, satisfaction with procedure and staff perception of ability to change practice.
- The secondary goal is to share study results with Vanderbilt MD's and policy committee to implement using Lidocaine & Afrin for every NG tube insertion order.

PROCEDURE OF IMPLEMENTATION

- IRB approval was obtained for the study , this approval allowed for waiver of consent.
- Distributed a voluntary anonymous survey to RN's assessing their perception and barriers to change practice
- Identified RN champions and gave instructions about the data collection form

