

Nasogastric tube (NGT) placement for feeding or suction is a common procedure. It is one of the most uncomfortable and painful procedures routinely performed on alert patients. Reduction of pain during NGT placement will likely make insertion easier and faster, decrease adverse events, and improve patient and provider satisfaction. Despite an accumulating body of evidence supporting the effectiveness of topical local anesthetics applied as a nasal spray to the nose or pharynx, placement is still routinely done without local anesthetics.

Lidocaine used alone or in combination with other agents appears to be the topical intranasal anesthetic of choice for NGT insertion. Current recommendations for adults include: lidocaine alone or in combination with other products: nebulized 4% lidocaine, atomized 4% lidocaine nasal spray and atomized 4% lidocaine with oxymetazoline (Afrin) nasal spray. Oxymetazoline is a vasoconstrictor that reduces nasal congestion but may increase blood pressure; it is not an analgesic.

Recommendations: Analgesia with topical lidocaine should be provided to all conscious patients who are having placement of an NG tube if they have a gag reflex and are older than six months of age (for more information about use in pediatric patients see: Intranasal Analgesia Prior to Insertion of Nasogastric Tube – Pediatric Fast Fact). Use a nasal spray with 4% lidocaine combined with 0.05% oxymetazoline in addition to tube lubrication.

Instructions:

1. Obtain or place an order for lidocaine/oxymetazoline 4%/0.05% nasal spray
2. Inform patient of procedure and obtain their cooperation
3. Ask patients to occlude one nostril and sniff, first on one side and then on the other, to determine if one side is more patent and therefore a better choice for an initial insertion attempt
4. Slowly spray the chosen nostril twice, spraying the anterior nostril and waiting thirty seconds to one minute before introducing more local anesthetic into the nostril.
 - May be applied to the other nostril if needed for additional attempts at placing the NG. Once administered in both nostrils, subsequent dosing should be spaced at least 6 hours apart.
 - **Caution:** Entire bottle should not be used for insertion of tube. Discard excess solution when procedure completed.
5. Lubricate the first 2 to 4 inches of the NGT with water soluble gel
6. Follow routine insertion procedures: instruct the patient to swallow (you may offer ice chips/water if not contraindicated) and advance the tube as the patient swallows. Swallowing small sips of water or lowering the chin onto the chest may enhance passage of the tube into the esophagus. If resistance is met, rotate tube slowly with downward advancement toward closer ear. Do not force. Remove NGT if unable to advance it safely. Attempt insertion in other nostril.

Cautions:

- The most common complications of NGT insertion include aspiration, tissue trauma and bleeding. Placement of the NGT can induce gagging or vomiting; therefore suction should always be available.
- Some of the lidocaine sprayed in the nose and posterior nasal passages will drip into the pharynx. It will taste bitter and can result in a sense of numbness. Some patients will report that they

can't swallow, because the sensation of normal swallowing is altered. The patient may cough and sputter and feel like they are having a hard time clearing their secretions. This can be a frightening experience to the uninitiated patient; practitioners may think they may have harmed the patient or that the patient is aspirating. Patients should be reassured and encouraged to breathe slowly and to cough to clear their airway. Lidocaine-oxymetazoline is contraindicated in patients without a gag reflex.

Other uses:

In addition to using this technique for NGT placement, it can also be used for placement of pH probes, scopes and other procedures.

References:

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