





System Medical Advisory Nasopharyngeal Airways January 23, 2019

In recent years, our system has on two occasions experienced mishaps in which a nasopharyngeal airway was placed and subsequently lost through the nares into the posterior oropharynx. Both were successfully retrieved with no apparent harm to the patients. However, the risk posed is high. Please review the below information to ensure the safety of our patients is maintained.

Nasopharyngeal Airways

Nasopharyngeal airways can be very useful tools in certain situations, in both the field and hospital setting. But before reaching for one, it is essential to understand the indications, contraindications and appropriate use of the device.

FUNCTION AND INDICATIONS

When a patient's mental status becomes altered, regardless of the cause, maintaining a patent airway is critical. One of the most common causes of airway obstruction in a patient is altered mental status resulting in loss of upper airway tone. A nasopharyngeal airway is an effective way to maintain an open airway and allow for more effective ventilation if needed.

A nasopharyngeal airway is a device that can be used for patients with or without a gag reflex.

SIZE SELECTION & INSERTION PROCEDURE

The first and critical step in inserting any type of adjunct airway device is selecting the correct size. Otherwise, the device may not be effective and could cause more harm than good.

To determine the correct size of a nasopharyngeal airway, measure from the tip of your patient's nose to the tip of their earlobe. In addition, choose a nasopharyngeal airway which has a diameter only slightly smaller than the patient's nares. If the nasopharyngeal airway is too narrow it may be at risk of being suctioned into the posterior pharynx during bag-mask ventilation.

A nasopharyngeal airway should be inserted with the bevel pointing towards the septum and following the natural curvature of the floor of the nasal cavity as it is advanced. Once the device is inserted the flange should rest on the nostril opening. The Provider must ensure the diameter of the nasopharyngeal airway and the flange diameter is large enough to not allow the nasopharyngeal airway to slip further down into the nasal passage. As with any airway device, the nasopharyngeal airway should be frequently evaluated for proper placement and function.

CONTRAINDICATIONS

There are a few contraindications for using a nasopharyngeal airway. The device should not be used on patients who have nasal fractures or an actively bleeding nose. In some cases, slight bleeding may occur when you insert the airway, which can be suctioned or wiped away.

TIPS

- Be gentle when inserting any type of airway device.
- Use a water soluble lubricant when inserting a nasopharyngeal airway.
- If resistance is felt during insertion of a nasopharyngeal airway, stop and try the other nostril.
- Try the right nare first Research has shown that the right nare is larger in most people.

Thanks for all you do. As always, please let us know if you have any questions.

Katherine Remick, MD, FAAP, FACEP, FAEMS
Interim Deputy Medical Director, Austin-Travis County EMS System
Executive Lead, National EMS for Children Innovation and Improvement Center Assistant Professor of Pediatrics, Dell Medical School, University of Texas at A stin
EMS Director, Pediatric Emergency Medicine Fellowship, Dell Medical School

Article Sources:

The American Red Cross. Airways Adjuncts. http://www.redcross.org; © 2018 ACLS Certification Institute.

Farzan, Sattar, MD, FACP, FCCP A Concise Handbook of Respiratory Diseases. Prentice Hall 1997. Accessed August 2014