

Technique To Convert An Orogastric Tube To A Nasogastric Tube

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Citation

S Kinthala, T Semei, S Nanduri, R Mudaraddi. *Technique To Convert An Orogastric Tube To A Nasogastric Tube*. The Internet Journal of Anesthesiology. 2012 Volume 30 Number 2.

Abstract

Sir,

It is not uncommon to face difficulty or even failure in passing a nasogastric tube when in need. Many times we receive patients in the intensive care unit in whom an orogastric tube was placed intra operatively or in emergency department for management where nasogastric tube placement was difficult or not possible. Nasogastric tubes may be more desirable for management of the same patient after extubation of endotracheal tube.

Orogastric tubes are less comfortable for the conscious patient causing more gagging and nausea hence increasing the possibility of vomiting. Conscious patients tend to bite the orogastric tube which can result in occlusion or damage¹. The presence of an orogastric tube adds to difficulty during mouth care in the intensive care patients who are sedated or on mechanical ventilation.

In spite of having various methods to place nasogastric tube in a difficult situation, it may be unwise to pull out the existing orogastric tube that was placed with difficulty in an attempt to place nasogastric tube. Multiple attempts to place nasogastric tube with difficulty may cause trauma and inconvenience to the patient. Therefore it is wise to convert existing an orogastric tube to an nasogastric tube.

While passing the oro and nasogastric tube in intubated patients, the most common sites of resistance at the laryngeal level are the arytenoid cartilages and piriform sinuses². Passage of orogastric tubes has a higher success rate than nasogastric tubes.

There are many techniques described in literature to pass a NG tube in difficult cases²⁻⁷. Using a split endotracheal tube as a guide tube, is an effective, fast and safe method for oral insertion of a gastric tube in anesthetized or unconscious

patient⁵. The success rate of NG tube insertion can be increased by using a ureteral guide wire as stylet, a slit endotracheal tube as an introducer, or head flexion with lateral neck pressure. Head flexion with lateral neck pressure is the easiest technique that has a high success rate and fewest complications⁶.

To our knowledge there are no techniques described in literature to convert an orogastric tube to a nasogastric tube. We are describing techniques that we use in our clinical practice for converting an existing orogastric tube to a nasogastric tube.

A lubricated suction catheter is passed gently through a nostril, once the contraindications for nasal catheter placement are ruled out. The proximal end of the orogastric tube is cut and inserted into the distal end of the suction catheter or vice versa (Fig: 1). A suture is then placed through it to make the union secure (Fig: 2) and to avoid the nasogastric tube slipping during the course of pulling it out through the nose. The suction catheter and orogastric tube as a single unit is then pulled out of the nose and the nasogastric tube is detached from suction catheter. The orogastric tube has become a nasogastric tube and can be secured safely at the desired length.

Figure 1

Fig: 1 (P) Proximal cut end of the Orogastric tube and (D) Distal end of the suction Catheter.



Figure 2

Fig: 2 (P) Proximal cut end of the Orogastric tube , (D) Distal end of the suction Catheter and (S) suture placed through the orogastric tube and suction catheter.



The size of suction catheter must be chosen to facilitate the insertion of orogastric tube. In the event the catheters cannot be inserted into each other a suture uniting the cut proximal end of orogastric tube can be placed and the distal end of the

suction catheter and the combined unit can be gently pulled through the nostril to successfully convert an orogastric tube to a nasogastric tube.

The technique of passage of a nasogastric tube in difficult situations using two gastric tubes is described in literature. The nasally passed tube is fixed to the bigger size orally passed tube like a ball and a socket. The disadvantage of this technique is if the size of both the tubes is not appropriate the union cannot be secured and there is chance of tube slipping while it is pulled. Advantage of our technique is even with size discrepancy of tubes the union will be more secured due to suture placement and high success rate.

In conclusion, we believe that in cases of placement of an orogastric tube because of failure of nasogastric placement, it is prudent to consider converting the orogastric to nasogastric tube as described in our method. It is also helpful in patients with limited neck mobility or with cervical traction.

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