

Nasogastric tube coiled around endotracheal tube

Sir,

Nasogastric tube (NGT) insertion is done routinely in abdominal surgeries. However, it can be really difficult in some cases such as head injury and facial trauma, esophageal narrowing, heavy built patients, and intubated patients.^[1] Various complications such as endotracheal insertion, intracranial insertion, blockade, and nasal bleeding have been reported.^[2] It is not uncommon for NGT to coil around into a knot in the pharynx; but, we came across a case where malpositioned NGT coiled around the endotracheal tube (ETT).

We report a case of a 60-year-old male posted for perforation peritonitis for which NGT was inserted, which coiled around the ETT and formed a knot. Literature on the same reveals that it is a rarest of the rare complication, which can be life-threatening.

A 60-year-old male, American Society of Anesthesiologists physical Status II was admitted as a case of perforation

peritonitis with gas under the diaphragm. He was planned for exploratory laparotomy and repair. Patient was brought into the operation theatre with an 18 FG NGT in the right naris until first mark and was thought to be rightly placed. Preoperative suction of NGT showed no collection. However, at the time of laryngoscopy NGT could not be seen in the oral cavity, so it was removed and another NGT was tried. As suction did not reveal anything, further maneuvers were performed, which were unsuccessful. While trying to pull the NGT out it was found that it is not moving, and there is concomitant movement of ETT with the NGT. Finally, decision was taken to insert the NGT under direct visualization using a laryngoscope and forcep. It was noticed that NGT has coiled around the ETT and formed a knot [Figure 1]. Laryngoscopy was done, knot was released using magill's forcep and NGT was taken out. Care was taken not to extubate the patient unintentionally. Finally, a 16 FG NGT was inserted successfully.

Various cases of malpositioning have been reported when NGT is inserted blindly. However, sometimes conditions arise when slightest manipulation of a malpositioned NGT can be life-threatening. Any resistance felt during insertion or removal of NGT in an intubated patient, which is associated with concurrent motion of ETT, a coiled NGT knotted around ETT should be suspected.^[1]

In the case reported above, the various failed attempts to remove the NGT and concomitant movement of ETT with NGT led to the possibility of NGT being coiled around ETT. Similar cases have been reported in few other case reports, but managing it is makes it a unique one and gives us a learning experience.^[3,4] Further management will depend upon condition of the airway, ease of intubation, need of

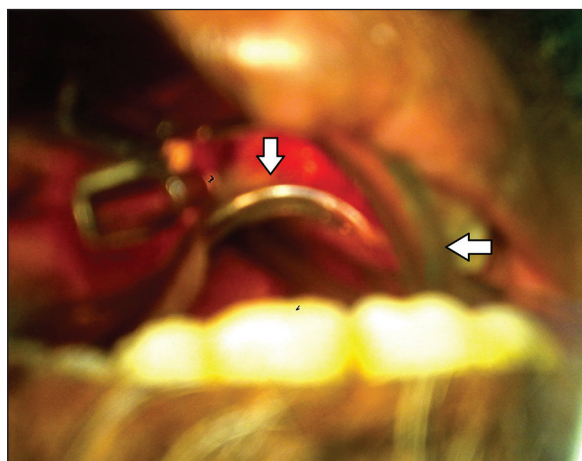


Figure 1: Arrow shows the coiling loops of nasogastric tube around endotracheal tube

decompression according to the surgery and position of the knot considering cutting and untying of knot. Knot can be left in position until extubation in the end of surgery, immediate extubation and reintubation,^[5] cutting the NGT under direct visualization with laryngoscope or fiberoscope.^[6] Our management was based on a number of considerations that the surgical procedure required a patent NGT for intraoperative gastric decompression. Because the coiled NGT was in access and the knot seemed to be loose, an attempt was taken to untie the knot under direct vision using a laryngoscope and Maggill's forcep which was successful. Every measure was taken not to accidentally extubate the patient.

Knitting of NGT can be prevented by its proper placement using special maneuvers such as acute flexion of head, manual forward displacement of the trachea,^[6] applying lateral pressure on the neck,^[7] freezing the gastric tube or inserting a guide wire or Fogarty catheter to increase the rigidity, lubrication using jelly, or direct guidance using laryngoscope and Magill's forcep.^[8] If while withdrawing a NGT, resistance is felt and there is concomitant motion of ETT, then a NGT coiled around ETT should be suspected. It is also to be noted that continued attempt at extraction may lead to fatal complications such as respiratory compromise or laryngospasm and irreversible repair.^[9] Hence, this case is a learning experience for all anesthesiologists in clinical practice and can avert unintentional extubation.

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