

Fracture of nasogastric tube: A case report

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ABSTRACT

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Nasogastric tube is commonly used for administration of nutrition or medication in hospital wards and Intensive Care Units. However, its use is not without complications. In the present paper, a case report of nasogastric tube breakage is presented.

INTRODUCTION

The use of nasogastric tubes is omnipresent, and clinicians often take their insertion, function and maintenance for granted. However, their use does not come without complications: sinusitis, sore throat and epistaxis. Luminal perforation, pulmonary injury, aspiration, and intracranial placement are some of them found in the literature¹⁻². In the present article, we present a case report of a fractured nasogastric tube in an Intensive Care Unit patient.

CASE REPORT

A 63 year old male with history of Hydrocephalus was admitted intubated in the Intensive Care Unit for Status epilepticus. In his 45th day of

hospitalisation, a programmed change of common nasogastric tube (NG) (single lumen Levin catheter) was performed. At the time, the patient was breathing via tracheostomy and was lightly sedated (Richmond Agitation Sedation scale: -1). An 18Fr catheter, was chosen. The tube was kept in the refrigerator in order to stiffening its natural curve. After lubrication of the end of a tube (local anaesthetic, such as 2% xylocaine gel), blind insertion was attempted via left nostril without problems. Position confirmation was assured via auscultation (syringe test) and aspiration of gastric content ; and the catheter was secured with tape. Yet, ten minutes later, during drug administration, a leak was noted just before the opening of the nostril (Figure 1). The leak was further confirmed with liquid administration and the NG tube was changed without any problems.

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Figure 1. Two snapshots of the nasogastric tube, just point are also displayed.



DISCUSSION

Several techniques have been described for NG tube insertion. Blind insertion remains the most common, yet under fluoroscopic, endoscopic, electromagnetic or direct surgical guidance is also used². The use of frozen NG tube or similar techniques is often chosen in order to increase insertion success rate to intubated patients³⁻⁵; as the latter patient category poses extra challenges¹.

Earlier literature reviews report that breaking of nasogastric tubes can happen to 11-20% of cases⁶. The latter can be caused either due to manufacturing defects or excessive feeding or drug administration impactions. In case of intracorporeal fractured tube fragments, these can be either removed endoscopically, or -if small enough- allowed to pass through gastrointestinal tract. We hypothesise that

excessive freezing may be the reason for NG tube breakage in our patient and that the direction of the breakage prevented leakage of gastric content during aspiration.

In any case high level of suspicion and frequent monitoring facilitates prevention and management of such mechanical complications.

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Author Disclosures:

Authors Savoulidou S and Aslanidis Th have no conflicts of interest or financial ties to disclose.

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