JPRAS Open 31 (2022) 134–136

Contents lists available at ScienceDirect

JPRAS Open

journal homepage: www.elsevier.com/locate/jpra

Short Communication

Rhinoplasty and Nasogastric Tube insertion in the Emergency Department

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ARTICLE INFO

Article history:
Received 6 July 2021
Accepted 18 October 2021
Available online 24 October 2021

Letter

A nasogastric (NG) tube is an important adjunct to the resuscitation of surgical patients.[1] Rhinoplasty is a commonly sought-after plastic surgery procedure and it remains true that patients who have undergone elective plastic surgery may present to the emergency department with common surgical complaints irrespective of any prior cosmetic procedure. Satisfactory recovery from rhinoplasty is multifaceted and it is important to understand the potential risks associated with NG insertion in patients' post-rhinoplasty.

NG tube placement involves the passage of a tube from the nasal nares to the stomach. NG tubes are used as a means to decompress the stomach in patients with intestinal obstruction or ileus, promote bowel rest, and reduce the risk of aspiration.[1] Additionally, NG tubes may allow for the diagnostic aspiration of gastric contents and the administration of nutrition or medication to patients. Contraindications to the insertion of a NG tube include maxillofacial trauma with cribriform plate injury, oesophageal disorders, unstable c-spine injuries, and bleeding diastases.[1]However, should a rhinoplasty be considered a contraindication to insertion of a NG tube?

Rhinoplasty is a surgical procedure performed open or closed—to improve the appearance and/or function of the nose.[2] Rhinoplasty is considered one of the most complex surgical procedures in plastic surgery, often involving a combination of surgical techniques such as osteotomy, alarplasty, and the careful placement of grafts.[2] Complications of rhinoplasty include post-operative deformities (e.g.,

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https://doi.org/10.1016/j.jpra.2021.10.001
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pollybeak-deformity, alar collapse, and asymmetry), skin and soft tissue complications (e.g., abnormal swelling, infections, hematomas, skin necrosis, subcutaneous cysts, and granulomas), and functional disturbances which may result in breathing problems.[3] Furthermore, during septorhinoplasty, the elongation of a fracture to the cribriform plate can result in iatrogenic skull base fractures and cerebrospinal fluid (CSF) leakage; this is a rare but noteworthy complication, which would be an absolute contraindication to NG tube insertion.[4]

The successful atraumatic placement of an NG tube often requires patient cooperation. Post-rhinoplasty patients may experience increased anxiety around nasal procedures, due to fear of disrupting the aesthetic outcome or in anticipation of pain. Patient's may also experience loss of mucosal sensitivity caused by surgical scarring which can give the impression of a blocked nose.[3]

Particular caution should be practised when placing an NG tube in these patients. We recommend doctors take a history to identify any red flags including a history of post-operative epistaxis, infection, or CSF rhinorrhoea. The examination of the patient should identify, obvious signs of nasal obstruction, nasal deformity, and maintain awareness of nasal cycle variation, which refers to the unnoticed partial congestion and decongestion of the nasal cavities; these should contribute to your decision to place the tube in the left or right nostril. The patient should be correctly positioned, and the selection of the correct tube and size is essential. Adequate lubrication should be used. These measures aim to reduce trauma to potentially friable scar tissue post-rhinoplasty. No untoward force should be used, and multiple attempts may cause unnecessary trauma and increase the risk of complications. Orogastric or percutaneous endoscopic gastrostomy may be considered for patients in the early post-operative period. In the long term, rhinoplasty should help maximize the function of the nasal airway which should allow for the safe and easy placement of an NG tube.[2,5]

The recovery time following rhinoplasty is usually between 2 weeks and 6 weeks. During this period, the patient will notice a reduction in oedema and ecchymosis and is advised to apply no direct pressure to the nose, including the use of glasses. Although the risk of causing any significant bleeding or infection is greatly reduced after two weeks, the placement of a NG may interfere with healing if attempted before 6 weeks post-surgery.[6]

Rhinoplasty continues to be one of the most commonly performed aesthetic surgical procedures. In the acute management of patients, the priority should remain safe evidence-based practice and adherence to ATLS and critical care guidelines. Rhinoplasty should aim to correct and preserve the normal anatomy as well as maintain the dynamic function of the nasal airway.[5] In our experience when carried out correctly, NG tube placement should not result in any unforeseen morbidity in patients who have fully healed from their rhinoplasty procedure.

Ethics statement/confirmation of patients' permission

Not applicable.

Declaration of Competing Interest

We have no conflicts of interest.

Funding

No funding was received.

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