Small Bowel Obstruction Due to Retained Gastrostomy Tube following Cut and Push Technique: A Case Report

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Introduction

Percutaneous endoscopic gastrostomy (PEG) tubes are commonly removed by traction on the internal bumper.

An alternative “cut-and-push” technique involves transecting the tube at skin level and advancing it into the stomach, with the expectation of spontaneous passage in stool.

Although generally considered safe, serious complications may occur.

Case Description

A 79-year-old woman with a history of subarachnoid and subdural hemorrhage, status post decompressive craniotomy, tracheostomy, and PEG placement.

She remained neurologically impaired and was later discharged on hospice care.

After tracheostomy decannulation, the PEG tube was removed at home by a hospice nurse using the cut-and-push technique

Three days later, she presented to the emergency department with abdominal pain, nausea, and vomiting, without evidence of tube passage.

Examination revealed stable vital signs, mild left upper quadrant tenderness, and abdominal distension.

CT imaging demonstrated small bowel obstruction with a transition point at the mid-small bowel corresponding to the retained PEG tube.

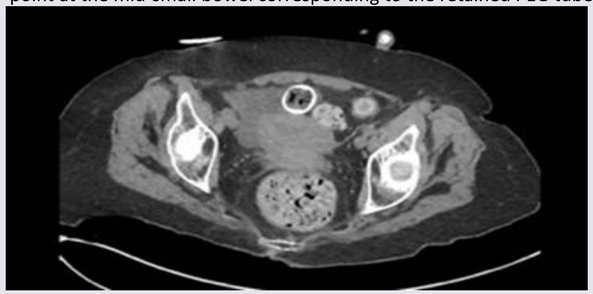

Figure 1. CT scan showing retained PEG Tube

Case Description (cont.)

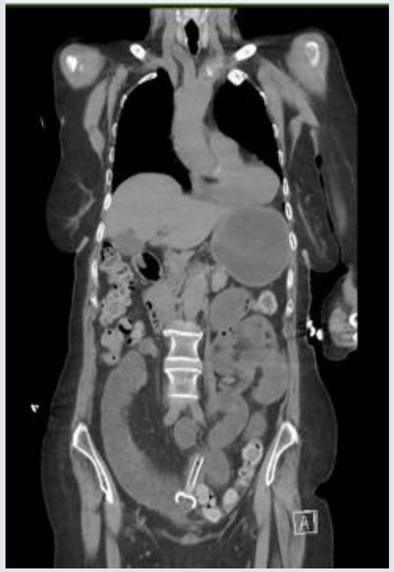

Figure 2. CT scan showing retained PEG Tube and dilated proximal small bowel

Diagnostic laparoscopy confirmed the obstruction, necessitating conversion to a mini-laparotomy.

The involved bowel segment was exteriorized, and an enterotomy was created to extract the PEG tube, which included the internal bumper and approximately 3 cm of tubing.

The enterotomy was closed primarily in two layers.

Postoperative course was uncomplicated.

She had return of bowel function by postoperative day two, tolerated a diet, and was discharged home on postoperative day four.

Figure 3.
Retained PEG Tube

Discussion

The cut-and-push technique is cited as a safe alternative for PEG removal, with most series reporting uneventful spontaneous passage.

However, complications such as retention and obstruction have been described, especially in patients with prior abdominal surgery, adhesions, or strictures.

Pediatric cases of perforation have also been reported.

Discussion (cont.)

This case highlights that even in adults without prior abdominal surgery, the cut-and-push method can result in small bowel obstruction requiring operative intervention.

Given that the standard pull technique is effective and associated only with transient discomfort, we recommend it remain the preferred method for PEG removal to minimize the risk of avoidable complications.

References

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