

Gastrojejunal Fistula Following Gastrostomy Tube

A Morgan, MD; A Griffin, DO; C Iwuchukwu, MD
University of Mississippi Medical Center, Department of Surgery

Introduction

- Enteral feeding is largely preferred over parenteral nutrition in patients with a functional gastrointestinal system due to associated risks with intravenous nutrition. Due to this, gastrostomy tubes are often placed in patients with poor voluntary intake, oropharyngeal dysphagia, or chronic illness to provide definitive nutritional access.
- In recent years, percutaneous endoscopic gastrostomy tube placement has become exceedingly popular due to its low cost and less invasive nature that can oftentimes not require general anesthesia in the more debilitated patients. So much so that it is estimated that between 160,000 to 200,00 PEG procedures occur each year in the United States.²
- Despite the widespread use of gastrostomy tubes, some patients can experience complications associated with this procedure including gastrocoliccutaneous fistula and dislodgement of gastrostomy tube.

Case Description

Our patient was a 71-year-old female with a history of congestive heart failure, type II diabetes, hypertension, multiple CVAs with residual cognitive deficits, and gastrostomy tube dependence who presented from a nursing home in August 2022 with reports of abdominal pain, fever, and emesis.

The patient had previously undergone placement of a percutaneous gastrostomy tube in April 2021. When inserted, the tube was noted to be 4cm at the skin, however, on this admission gastrostomy tube was noted to be at 12cm.

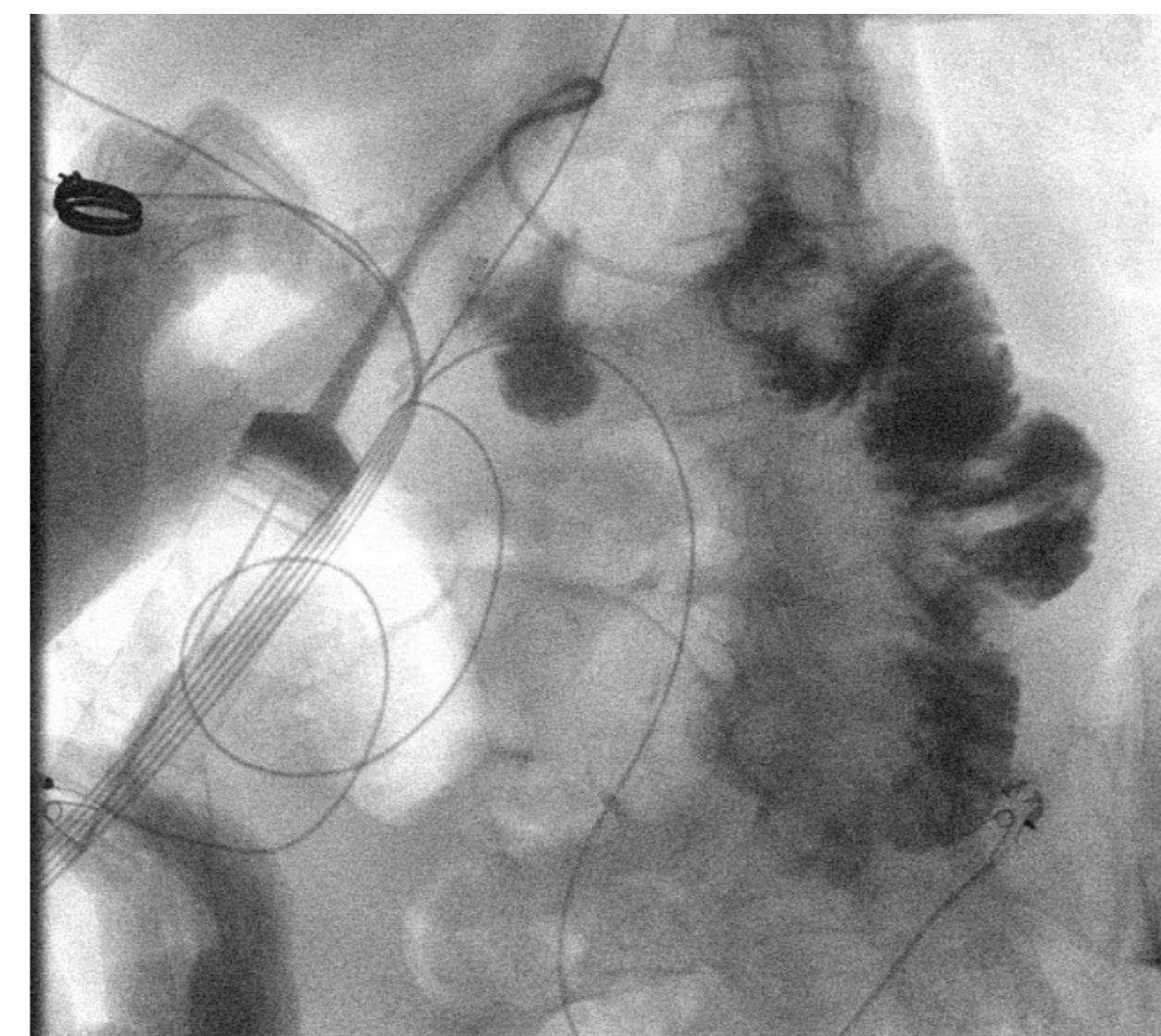


Image 1: CT imaging showing the gastrostomy tube traversing the posterior aspect of the stomach and fistulized with jejunum with balloon inflated.

Image 2: Fluoroscopic image showing contrast from gastrostomy tube going into jejunum.

CT imaging revealed a gastrostomy tube traversing the posterior wall of the stomach and creating a fistula into the jejunum, with the balloon inflated within jejunum. [Figure 1] Per nursing home records, the gastrostomy had last been exchanged by nursing home staff 3 weeks prior to presentation with the balloon inflated to 20cc. Since the patient was vitally stable and nontender on exam, a gastrostomy tube study was performed under fluoroscopic imaging revealing contrast promptly entering the jejunum without extraluminal extravasation. An Upper GI was also performed which showed contrast within the gastric lumen with no extravasation. The gastrostomy tube was removed and a new one was placed at 4cm. CT with gastrostomy tube study was performed and revealed no extravasation of contrast within the abdomen, with contrast noted within the large bowel and the appendix. The patient was promptly discharged back to their nursing home and is doing well tolerating tube feeds at goal.

Conclusion

- With the prevalence of gastrostomy tube placement, it is important to remember the complications that can arise from this procedure.
- This case shows an instance of gastrojejunal fistula formation following gastrostomy tube placement over a year after percutaneous placement. This formation was likely helped by the depth of the gastrostomy tube when replaced by nursing home, and further encourages careful monitoring following initial placement.

References

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