Early Perforation of PEG Tube Through Sigmoid Colon

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Operation

- The patient was transferred to the hospital and taken for an exploratory laparotomy.
- The G tube was identified to be perforating through the sigmoid colon.
- The affected portion of the colon was resected and a side to side anastomosis was performed.
- Additionally, a wedge resection of the tube site on the stomach was completed and a jejunostomy tube was placed.
- The patient recovered well and was discharged on postoperative day ten.

Figure 1



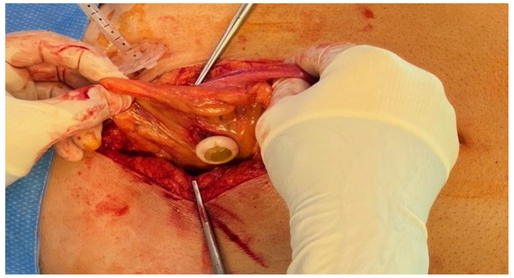
Case Description

- PEG (percutaneous endoscopic gastrostomy) tube placement is the most common procedure performed for enteral nutrition for patients who are unable to tolerate PO intake (1).
- PEG tube complications can occur in 14–23% of cases (2,3,4) and can include dislodgement, pneumoperitoneum and injury to surrounding structures (5).
- Colonic injury from this procedure is extremely rare and most commonly involves the transverse colon (6,7).
- Our patient is a 64-year-old male with a history of COPD and previous tracheostomy.
- The patient required long-term enteral feeding access and a PEG tube was placed at the bedside of his LTAC (long term acute care) facility. The patient developed abdominal pain 3 days after the procedure.
- CT scan performed demonstrated pneumoperitoneum and a dislodged gastrostomy tube (Figure 1).

Discussion

- Major complications involving PEG tubes have an incidence of 3-8%.
- These can include early tube dislodgement (<14 days), buried bumper syndrome, and injury to surrounding structures.
- Colonic injury after PEG tube placement is rare, with an incidence of 0.2-0.76% (8).
- Most of these complications occur in the transverse colon of patients who have distended colons or lax mesentery.
- To prevent adjacent organ injury, it is essential to locate the insertion site on the abdominal wall using endoscopic trans-illumination and one-to-one finger indentation (2, 9).
- Treatment of colonic injury can vary depending on presentation. An exploratory laparotomy with an end colostomy has been described to manage late tube dislodgement with sigmoid gastro-colocutaneous fistula (GCCF) (8).
- We present an early G tube dislodgement without a GCCF that required sigmoid resection and primary anastomosis.
- Surgeons may consider performing a primary anastomosis for this complication and avoid a colostomy.
- To our knowledge, this is the first case of early sigmoid colon perforation after PEG tube placement that did not require an end colostomy.

Figure 2



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