

# Extensive intra-abdominal adhesions

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## Background

- Intra-abdominal adhesions are a significant cause of morbidity and mortality intraoperatively and postoperatively
- Adhesions typically form after abdominal procedures, and they form from the balance between fibrin formation and degradation in the peritoneal cavity
- Important complications include risk of inadvertent enterotomy at reoperation, possible gastric perforation, prolonged operative time spent performing lysis of adhesions, future infertility, chronic pelvic pain, and intestinal obstruction

## Case Presentation

- 84-year-old male with a past medical history of atrial fibrillation, GERD, hyperlipidemia, lumbar disc disease, peripheral neuropathy, osteoarthritis, BP, and depression.
- Patient surgical history included previous cervical spine surgery, left fifth toe amputation, right total hip arthroplasty, and tonsillectomy. **No previous abdominal surgeries.**
- Admitted for encephalopathy and diagnosed with encephalopathy secondary to ischemic stroke. **History of previous dysphagia which had worsened during admission.**
- General surgery attempted to place percutaneous endoscopic gastrostomy tube (PEG), but the procedure was aborted as the surgeon was unable to transilluminate the abdominal wall.
- Multiple small polyps in the gastric mucosa for which biopsies were taken. Pathology resulted as fundic gland polyp.
- Patient was taken back to the operating room the following day for an endoscopic assisted laparoscopic gastrostomy tube placement. **Extensive adhesions were noted and were lysed (Figure 1)** and additional two ports were placed to help with lysis of adhesions. The small bowel along with omentum was stuck with adhesions.
- The **gastrostomy tube was placed under direct laparoscopic view (Figure 2)**. The operating room time was significantly extended due to the need for extensive lysis of adhesions. He had no immediate postoperative complications.

## Images

Figure 1: Intra-abdominal cavity after lysis of adhesions

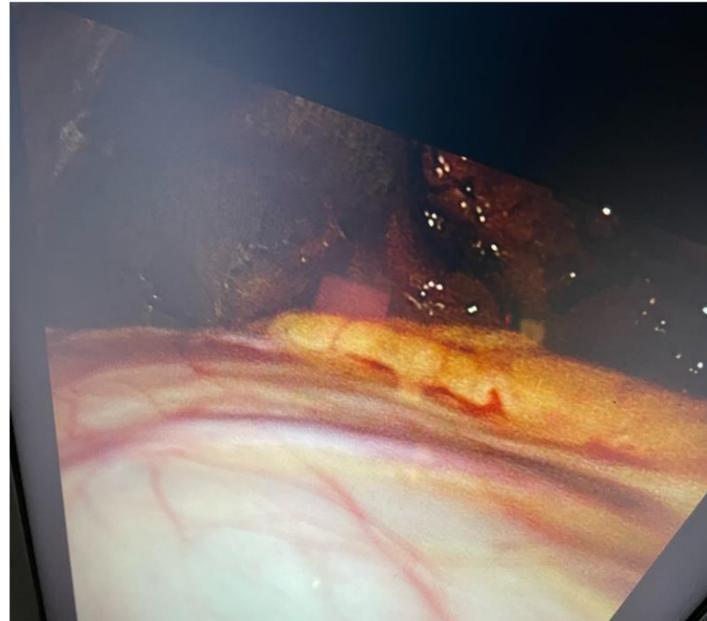


Figure 2: Gastrostomy tube in the stomach



## Discussion

- In this case, the patient had extensive intra-abdominal adhesions that were not expected based on the patient's past medical and surgical history. Because of this, he had a significantly prolonged operating time
- Intra-abdominal adhesions are more common with increasing number of abdominal surgeries
- Patient age and three or more previous laparotomies appeared to be independent parameters predicting inadvertent enterotomy
- Inadvertent enterotomy is a complication that can occur during adhesiolysis
- Inadvertent enterotomy has significantly more postoperative complications including urgent relaparotomies, a higher rate of admission to the intensive care unit, parenteral nutrition usage, and a longer postoperative hospital stay
- Surgeons should also be aware of the possibility of adhesions in patients with no previous abdominal surgeries

## Conclusion

- In this case, the patient had no history of abdominal surgeries, but extensive abdominal adhesions were noted. Operating room time was extended, and additional ports were placed intraoperatively to assist in lysis of adhesions.
- Inadvertent enterotomy is a serious complication that can occur during adhesiolysis and should be avoided at all costs.
- Intra-abdominal adhesions are a complication often seen in the operating room for which all surgeons should be aware.

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