Hybrid Laparoscopic and Endoscopic Management of Gastric Band Erosion Resulting in Bowel Obstruction

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Introduction

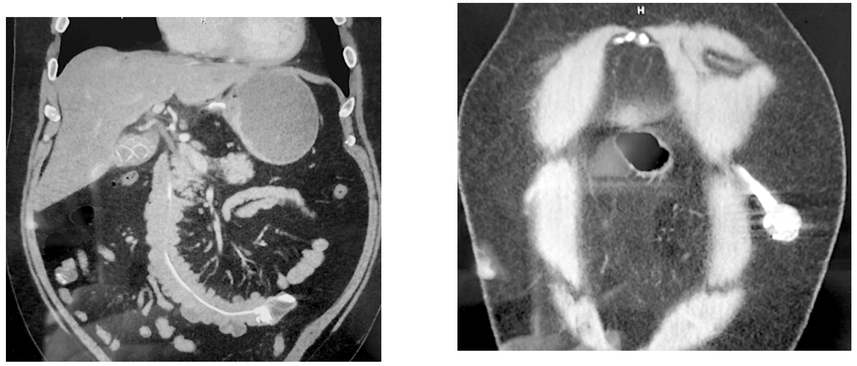
Lap band erosion can occur in as many as 3.4% of patients who have them. Several symptoms should raise suspicion of band erosion including cessation of weight loss, weight regain, and infection of the port site. However, many are completely asymptomatic or can present in unexpected ways.

The management of lap band erosion in patients with hybrid laparoscopic and endoscopic retrieval expedites recovery. This case demonstrates the feasibility of minimally invasive approach in treating in lap band erosions and describes an uncommon case of band migration to the small bowel.

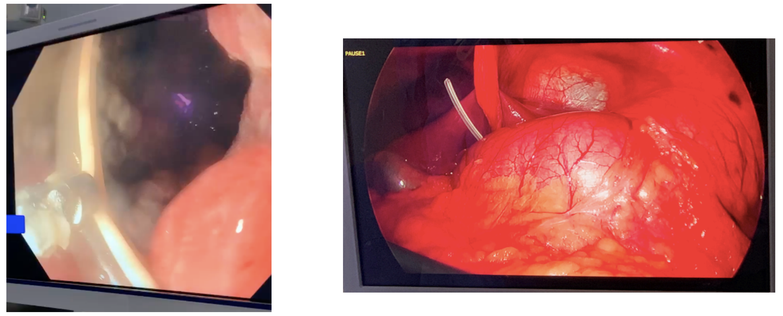
Case Summary

A 48-year-old male who presented to the ED with abdominal pain and signs and symptoms consistent with a small bowel obstruction. The patient had a history of laparoscopic gastric band placement over 5 years previously with currently no fluid remaining in his band. Otherwise, the patient was previously healthy with no further surgical history.

Based on imaging, there was concern for erosion and distal migration of the band causing obstruction in the proximal jejunum. The patient was taken to the OR and managed via hybrid laparoscopic manipulation and endoscopic retrieval of the band without enterotomy. The patient recovered uneventfully and was discharged shortly thereafter.



Pre-operative CT showing port placement and migration of the band into the jejunum.



Left: Intra-operative EGD imaging of band in the jejunum being moved endoscopically without need for enterotomy
Right: Intra-operative laparoscopic imaging of cut band from the port.

Discussion

Laparoscopic gastric banding is a widely used weight loss method. Its popularity has recently faded as use of gastric bypass and gastric sleeve have increased. However, management of gastric bands and their complications remains important. Band erosion is a well-documented complication that can occur at any point in the post-operative period. Most studies have focused on erosion management within the first 18-24 months of placement.

Complications from these said erosion become the forefront of surgical management in this cohort. Once erosion occurs, migration into distal bowel is, while rare, possible. Therefore, when treating bowel obstructions in patients with bands, imaging is important to determine if the band is the etiology. If this is the case, utilizing minimally invasive management when possible becomes ideal to mitigate further complications and expedite the hospital course. While laparoscopic vs endoscopic gastric band erosion procedures have not been well compared, this case demonstrates the effectiveness of a hybrid approach under specific circumstances.

We believe our case is a rare example of lap band bowel obstruction to be resolved utilizing a combination of laparoscopic and endoscopic techniques without need for enterotomy or gastronomy. This treatment is effective and should result in fewer complications than other approaches.

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