Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Visceral Surgery

Laparoscopic Gastrotomy for Fully Migrated Gastric Band: Case Report

Djogbe Rogelli Michaël Gnidé[1]*, Ballouch Mohamed[1], Halis Lynda[2], Halabi Maen[2]

[1]Department of Visceral Surgery, Mohammed V Military Teaching Hospital, Faculty of Medicine and Pharmacy Mohammed V University, Rabat, Morocco
[2]Department of Visceral Surgery, Sens Hospital Center, France

DOI: https://doi.org/10.36347/sjmcr.2025.v13i03.021 | **Received:** 26.01.2025 | **Accepted:** 04.03.2025 | **Published:** 15.03.2025

***Corresponding author:** Djogbe Rogelli Michaël Gnidé
Department of Visceral Surgery, Mohammed V Military Teaching Hospital, Faculty of Medicine and Pharmacy Mohammed V University, Rabat, Morocco

Abstract **Case Report**

Laparoscopic adjustable gastric banding (LAGB) is a bariatric procedure that can lead to complications, including complete intragastric migration. We present the case of a 35-year-old woman with a history of LAGB placement 11 years previously who presented with epigastric pain after 10 years without follow-up. Endoscopy confirmed complete migration of the band. A laparoscopic gastrotomy was performed to remove the band and the patient recovered well. This case highlights the need for long-term follow-up after bariatric surgery. Early detection by routine endoscopy and minimally invasive management can prevent serious complications and improve patient outcomes.

Keywords: Gastric band migration, bariatric complications, endoscopic diagnosis, laparoscopic gastrotomy, long-term follow-up.

INTRODUCTION

Bariatric surgery is one of the most effective treatments for adults with severe obesity and its comorbidities. Although it has better long-term nutritional effects than any other bariatric surgical technique, the laparoscopic adjustable gastric band (LAGB) is the least used because of its less convincing results and complication rate [1]. One complication is complete migration of the gastric band into the gastric cavity.

Here we report a case of complete intragastric migration of a LAGB performed by laparoscopic gastrotomy.

CASE REPORT

This is a 35-year-old patient with no medical history other than maternal familial obesity who underwent laparoscopic adjustable gastric banding (Figure 1) 11 years ago for obesity (weight 92 kg, height 1.64, BMI 34.2) after failure of hygienic and dietary measures.

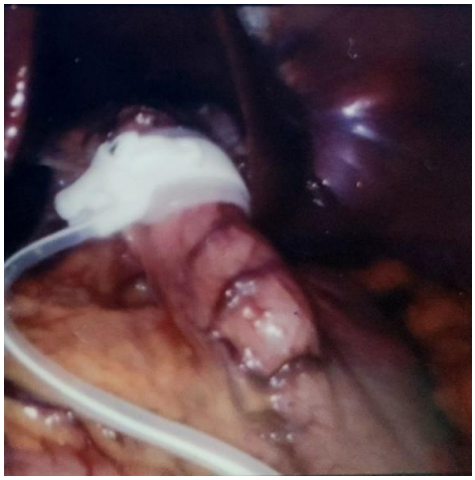

Figure 1: Gastric banding

Post-operative management was straightforward and the patient was followed for one and a half years with psychological and dietary counselling and band tightening. Estimated weight loss at 18 months was 22 kg (BMI 26.5). The patient was subsequently lost to follow-up.

After 10 years without follow-up, she presented with epigastric pain without other associated symptoms.

Fibroscopy was ordered and showed complete intragastric migration (Figure 2).

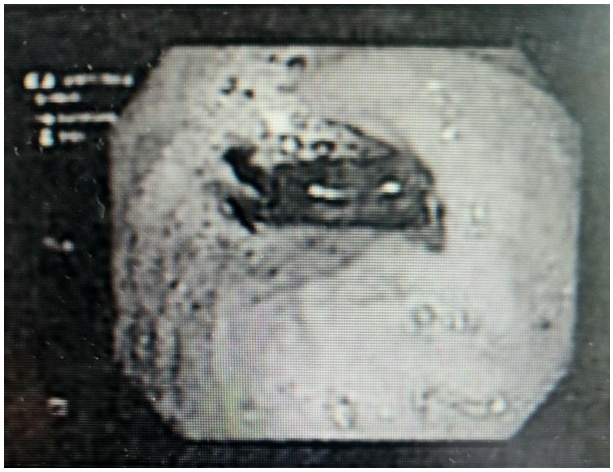

Figure 2: Fibroscopic view showing intragastric migration

The patient was therefore scheduled for laparoscopic management. Exploration revealed the catheter exiting the stomach through an orifice with no visualisation of the band. A longitudinal gastrotomy (Figure 3) was performed to section the catheter and extract the band (Figure 4). The gastric incision and catheter orifice were sutured with 2.0 absorbable suture and contact drainage was performed with a Blake drain.

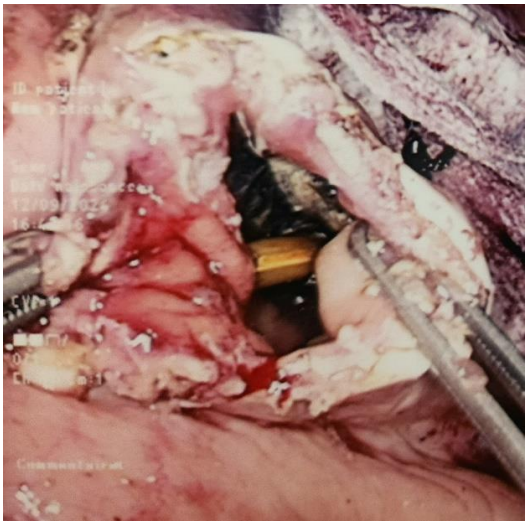

Figure 3: Gastrotomy

Figure 4: Gastric band removed from stomach

The postoperative period was marked by fever for 72 hours from Day 2 to Day 4, which progressed well under antibiotic treatment with ceftriaxone, metronidazole, gentamicin and antifungals. Blood cultures were negative. The patient was discharged on Day 7.

DISCUSSION

Our patient was 24 years old when the band was placed. Gastric banding is most commonly performed in women of childbearing age.

She was followed for one year before being lost to follow-up. Our case raises the issue of post-operative follow-up for bariatric surgery in general and gastric banding in particular. The literature recommends long-term multidisciplinary follow-up, more frequent initially (about four times in the first year) and then once or twice a year, because of the risk of weight regain, nutritional deficiencies and potentially serious medical and surgical complications [2]). Follow-up compliance is generally 90% after one year, 30% after the first year and less than 10% after 10 years [3].

Gastric band migration is a rare but serious complication of laparoscopic adjustable gastric banding (LAGB) for obesity. The clinical symptoms of these complications are not specific. They may include epigastric pain, hematemesis, partial or total bowel obstruction or even peritonitis [4].

The precise mechanisms underlying intragastric migration are not fully understood, but factors such as erosion of the band through the gastric wall, chronic gastric irritation, and poor patient compliance with follow-up care may play a role [5].

Routine endoscopic follow-up can detect early band migration, with one study reporting an incidence of 7.5% [6].

Band erosion can lead to intragastric migration with possible further movement into the small bowel. In extreme cases, the migrated band can cause bowel obstruction or even exit the body through the rectum. Complications can include biliary obstruction due to distortion of the ampulla by the migrated band [7].

Our case was managed by laparoscopic gastrotomy. Treatment options to remove the migrated band include endoscopy, colonoscopy (if the band is at the ileocecal valve), laparoscopy or mini-laparotomy [8]. Minimally invasive removal techniques have been developed, including endoscopic-assisted approaches and specialized devices such as the gastric band cutter [6, 9]. These methods can help patients avoid more invasive procedures such as laparotomy or gastrostomy. Drainage in contact with the suture and parenteral antibiotic therapy for 7 days have also been reported in the literature [10].

CONCLUSION

Complete intragastric migration of a gastric band is a rare but serious complication of laparoscopic adjustable gastric banding, highlighting the importance of long-term follow-up. The band can be removed by endoscopy, laparoscopy or mini-laparotomy. Minimally invasive procedures such as endoscopy using a gastric band cutter should be preferred when LAGB migration is complete. This case highlights the need for routine endoscopic surveillance to detect early migration and avoid the need for more invasive procedures. Improved patient education and adherence to follow-up protocols are essential to prevent complications and optimize long-term surgical outcomes.

REFERENCES

1. Eid, I., Birch, D. W., Sharma, A. M., Sherman, V., & Karmali, S. (2011). Complications associated with adjustable gastric banding for morbid obesity: a surgeon's guide. *Canadian Journal of Surgery*, *54*(1), 61–66. https://doi.org/10.1503/cjs.015709
2. Anveden, A., Peltonen, M., Näslund, I., Torgerson, J., & Carlsson, L. M. (2020). Long-term incidence of gallstone disease after bariatric surgery. *Surgery for Obesity and Related Diseases*, *16*(10), 1474–1482. https://doi.org/10.1016/j.soard.2020.05.025
3. Chang, V. C., Pan, P., Shah, S. K., Srinivasan, A., Haberl, E., Wan, C., Kajese, T. M., Primomo, J. A., & Davis, G. (2020). Routine preoperative endoscopy in patients undergoing bariatric surgery. *Surgery for Obesity and Related Diseases*, *16*(6), 745–750. https://doi.org/10.1016/j.soard.2020.02.002
4. Garrido, D., & Bush, L. M. (2013). Liver abscess as a complication of laparoscopic gastric banding bariatric surgery. *Surgical Infections*, *14*(5), 464–469. https://doi.org/10.1089/sur.2012.023
5. Castaner, O., Goday, A., Park, Y., Lee, S., Magkos, F., Shiow, S. T. E., & Schröder, H. (2018). The Gut Microbiome Profile in Obesity: A Systematic review. *International Journal of Endocrinology*, 2018, 1–9. https://doi.org/10.1155/2018/4095789
6. Silecchia, G., Restuccia, A., Elmore, U., Polito, D., Perrotta, N., Genco, A., ... & Basso, N. (2001). Laparoscopic adjustable silicone gastric banding: prospective evaluation of intragastric migration of the lap-band. *Surgical Laparoscopy Endoscopy & Percutaneous Techniques*, *11*(4), 229-234.
7. Nasser, H., Ivanics, T., Leonard-Murali, S., & Genaw, J. (2019). A case report of an adjustable gastric band erosion and migration into the jejunum resulting in biliary obstruction. *International Journal of Surgery Case Reports*, 64, 139–142. https://doi.org/10.1016/j.ijscr.2019.10.025
8. Durmishi, Y., & Kavaja, F. (2023). Migration transgastrique asymptomatique d'un anneau gastrique. *Journal De Chirurgie Viscérale*, *161*(1), 75–77. https://doi.org/10.1016/j.jchirv.2023.11.008

9. De Tejada, A. H., Calleja, J., Jiménez, M., Rojo, V., Santander, C., Rial, J., García, R., Chennat, J., Picardo, A., & Abreu, L. (2012). Gastric band cutter to remove a migrated gastric band. *Endoscopy*, *44*(S 02), E40–E41. https://doi.org/10.1055/s-0031-1291520

10. Chevallier, J. (2006). Traitement de la migration intragastrique d'un anneau gastrique pour obésité morbide. *Journal De Chirurgie*, *143*(4), 243–245. https://doi.org/10.1016/s0021-7697(06)73672-9