Laparoscopic Redo Nissen Fundoplication For Failed Anti-Reflux Surgery: A Case Report

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INTRODUCTION

Gastroesophageal reflux disease (GERD) is one of the most common digestive disorders int he U.S., with an estimated prevalence of 18.1% to 27.8%. Laparoscopic anti-reflux surgery has remained the gold standard for the surgical management of GERD. However, long-term outcomes show that failure rates can be as high as 30%, and between 3% and 6% of patients require reoperation. Managing patients who do not respond to anti-reflux surgery is complex and not an easy task.

OBJECTIVE

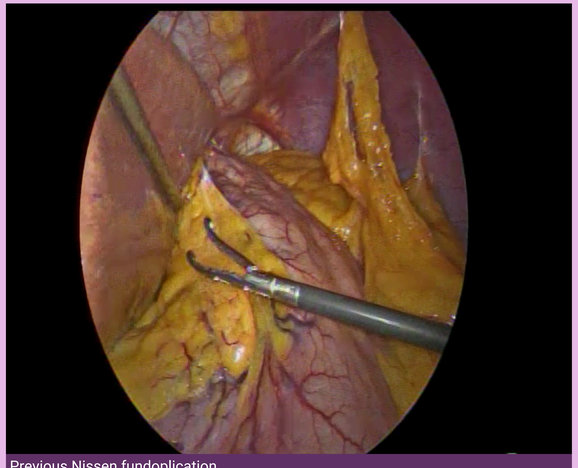
The objective is to present the case of the surgical approach in a patient with a failed anti-reflux surgery, along with a review of the literature.

CASE PRESENTATION

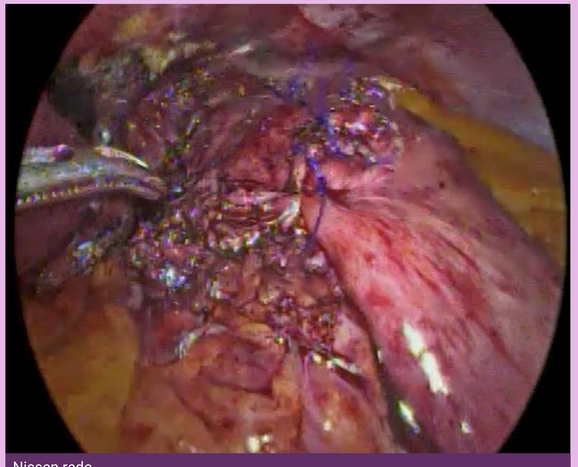
A 57-year-old male with a history of hiatal hernia treated with Nissen fundoplication one year ago. He started 8 months ago experiencing pathological gastroesophageal reflux, which did not improve with proton pump inhibitors.

An esophagogastroduodenal series was performed, revealing peaks of esophageal reflux and a non-reducible hiatal hernia. An endoscopy showed the esophagogastric junction at 37 cm from the dental arch with pinching at 41 cm, as well as an open fundoplication with gastric folds extending into the thoracic cavity corresponding to a 4 cm Type 1 hiatal hernia.

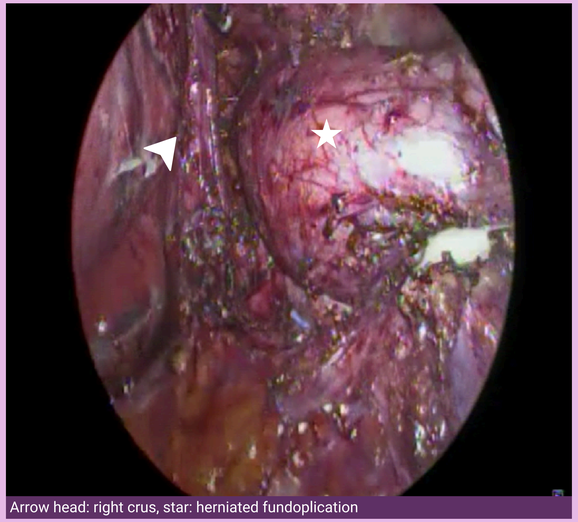
A laparoscopic redo Nissen fundoplication was decided upon. The procedure began by identifying the previous Nissen fundoplication. Intraoperative endoscopy was performed, revealing a loose fundoplication covering 210° and angled. The dissection began to completely takedown the fundoplication, confirmed with endoscopy.



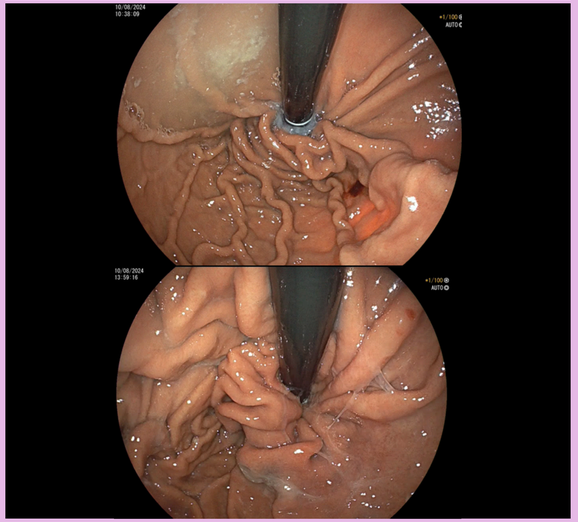
Previous Nissen fundoplication



Nissen redo



Arrow head: right crus, star: herniated fundoplication



Subsequently, the hiatal dissection was performed to identify both crura, the esophagogastric junction was retracted to be at least 2 cm within the abdominal cavity, and plication was done. A new Nissen fundoplication was then performed, which was confirmed again with endoscopy.
The patient's evolution was uneventful.

CONCLUSIONS

Different techniques have been proposed for revisional surgery; however, there is no consensus on which should be the preferred option. Some patients may benefit from reconstructing the failed or mispositioned fundoplication, while others will require resection and takedown of the previous fundoplication.

REFERENCES

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