MEDIUM AND LONG-TERM OUTCOMES AFTER LAPAROSCOPIC REDO OF PARAESOPHAGEAL HERNIA REPAIR

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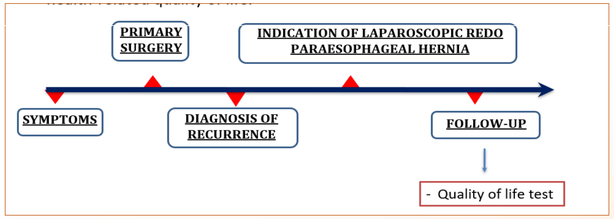
INTRODUCTION

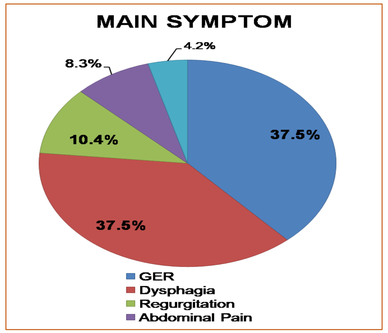
Although laparoscopic paraesophageal hernia repair has demonstrated to be a safe technique with a satisfactory surgical outcome, the high number of recurrences in the follow-up, with series up to 42%, continues to be the Achilles heel of this morbid condition. Up to 6% of these patients will require a new surgery, technically demanding with a higher morbidity and mortality rate. The aim of this study is to assess intraoperative and postoperative outcomes as well as the quality of life of patients undergoing laparoscopic redo of paraesophageal hernia (LRPH) in our institution.

MATERIAL AND METHODS

We retrospectively analysed a prospectively collected database of patients with recurrence of paraesophageal hernia (types II-III-IV) who underwent a LRPH between 2005 and 2022.

Variables evaluated included demographics, intraoperative findings, surgical, morbidity, mortality and health-related quality of life outcomes.



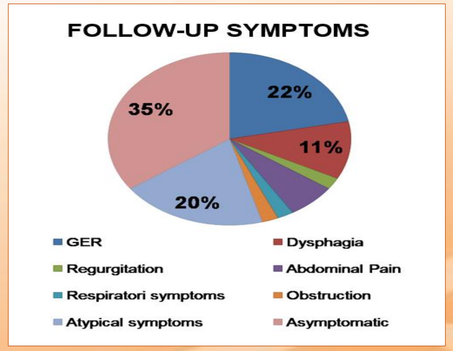


RESULTS

A total of 48 patients who underwent of LRPH were included in the analysis. 70% of them were women. The mean age was 61 years (range 31, 81). Most patients presented low comorbidities, classified as ASA grades I and II. Primary hiatal hernia repair was approached laparoscopically in 93.8% (n=45) of patients, mostly by Nissen technique and only requiring conversion to open in 3 cases.

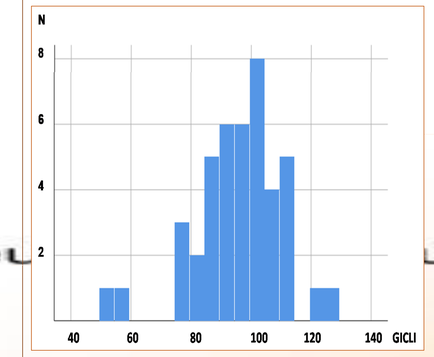
The main symptom that patients reported was with the same frequency dysphagia and reflux in 37.5% (n=18). However, abdominal pain and respiratory symptoms were presented in considerable frequencies.

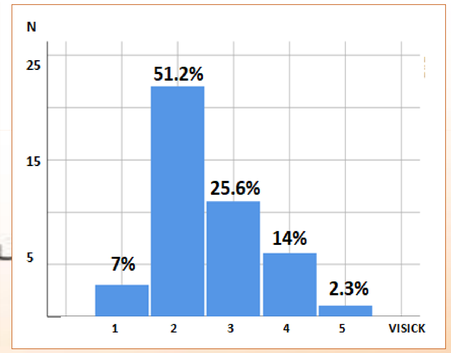
Many complementary tests were performed on our patients during the follow-up in order to find out the ethiology of their gastrointestinal disorder. 77.8% of patients presented a pathological upper endoscopy, proving a paraesophageal hernia in 53% of the cases. Swallow study was another of the most widely used complementary tests and it was pathological in 75% of our database, diagnosing paraesophageal hernia in 58,5%.



The redo surgery was approached laparoscopically in 93.6% of patients only needing conversion to open in 4 cases. The mean surgery time was about 186 min. A complication with the previous fundoplication was observed in 75.6 % of patients being the migration of the fundoplication the main one and followed by its disruption. 31 % of patients have hiatus affection. Regarding the surgical technique used, re-Nissen fundoplication was fashioned in 60.4% (n=29), Toupet fundoplication in 20.8% (n=10) and Dor fundoplication in 8.3% (n=4). There was a low morbidity rate in our study. Only 7 patients had intraoperative complications being the most frequent pleura and gastric fundus opening. Concerning about postoperative complications, only 6% of patients presented major ones, classified as grades III, IV and V of Clavien-Dindo scale.

We have been following our patients for an average of 25 months. Few patients have referred symptoms that could be related to a new recurrence. In fact, only 18% on recurrences have been objectified by complementary tests.





During the follow-up, patients answered two tests about quality of life related to the gastrointestinal sphere. In GICLI test we reached an average of 96.12 points that mean good postoperative outcomes in terms of quality of life.

The results of Visik test could be summarized as 58.2% of patients have good quality of life after surgery, not needing any other treatment, and in only 16.3% of cases, redo surgery has brought them a negative impact on quality of life.

Finally, one of the main goals of this study was to find out if there is any condition that could help us to predict the quality of life of the patients after the redo surgery.

We have compared the quality of life assessment to some clinical, surgical and morbidity variables. No statistically significant results have been achieved and this could be explained by the small sample size of this study.

CONCLUSION

Eventually, in this study we have observed that in skilled hands and in centers of expertise laparoscopic redo of paraesophageal hernia repair (LRPH) can offer good postoperative outcomes with a significant improvement in quality of life.