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Meeting abstract

Giant paraesophageal hernia in an elderly woman: laparoscopic fundoplication and mesh in the hiatus

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Objective

Large hiatal hernias are more common in older patients and they are more likely to be female. In addition, the patients who underwent operation for large hiatal hernia are on average 20 years older than patients without hiatal hernias treated for elective antireflux surgery. The laparoscopic surgery rapidly became the more acceptable approach for gastrooesophageal reflux disease and repair of any associated hernia, not only for surgeons but also for the medical community. The objective of this study is to analyze the feasibility, the safety and the efficacy of laparoscopic repair of giant paraesophageal hernia in an elderly woman.

Methods

A 78-year-old female (ASA II, BMI 26) with a 15-year history of postprandial fullness in the retrosternal area was admitted for increasing epigastric pain and nausea due to intermittent obstruction. X-ray of her chest showed an air-fluid level in the retrocardiac area, suggesting a hiatal hernia (Figure 1). An endoscopic examination and an upper-gastrointestinal barium (Figure 2) confirmed the paraoesophageal defect with dilated stomach herniated intrathoracically.

In addition, endoscopy revealed the presence of severe esophagitis. At subsequent operation, the patient was placed in a dorsal lithotomy position with reverse Trendelenbourg tilt. The surgeon works positioned between patient's legs.

Four 5 mm and one 10 mm laparoscopic ports were placed in the upper abdomen. The left lateral segment of the liver was retracted anteriorly with a flexible retractor. Handling gently the stomach with grasper the hernia is reduced in the abdomen. The hernia sac is fully removed from the mediastinum using a combination of sharp dissection with ultrasonic shears and blunt dissection with

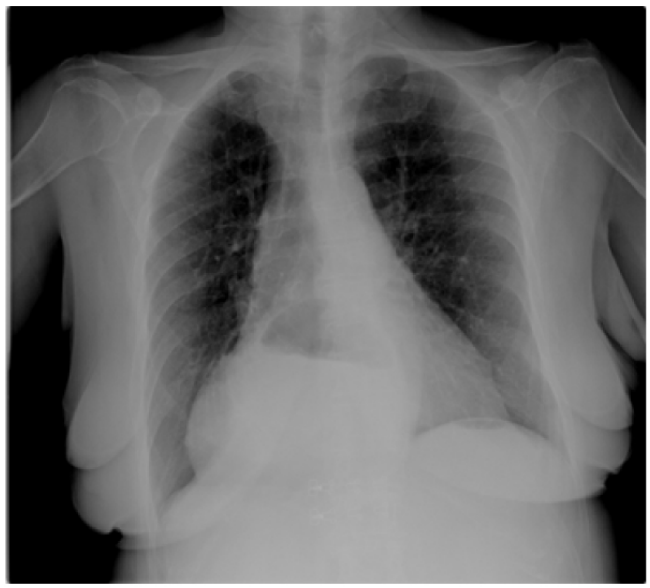

Figure 1
Chest X-ray showing an air fluid level in the retrocardiac position.

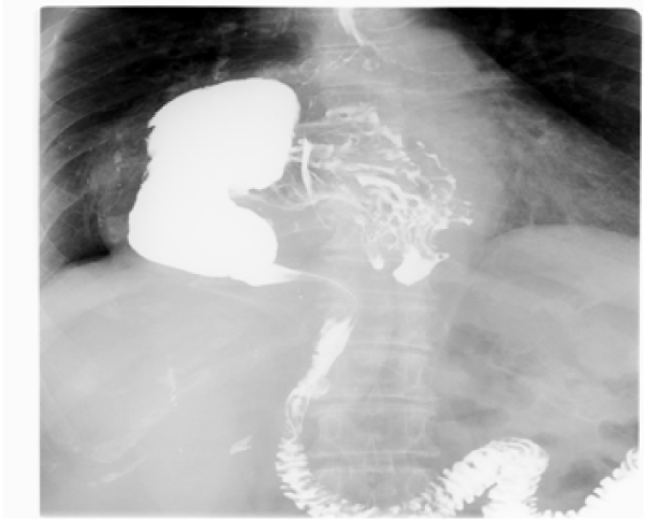

Figure 2
Preoperative Barium esophagogram showing a large paraesophageal hernia.

graspers. Then a tape was passed around the oesophagus, and the gastroesophageal junction was pulled into the abdomen to facilitate full dissection of the oesophageal hiatus.

The defect measured 8 × 10 cm. Three nonabsorbable sutures were placed posterior the oesophagus to approximate the crura. However, to prevent recurrence, more frequent in patients with larger hiatal hernia, adequate crural closure by means of prosthetic material was mandatory.

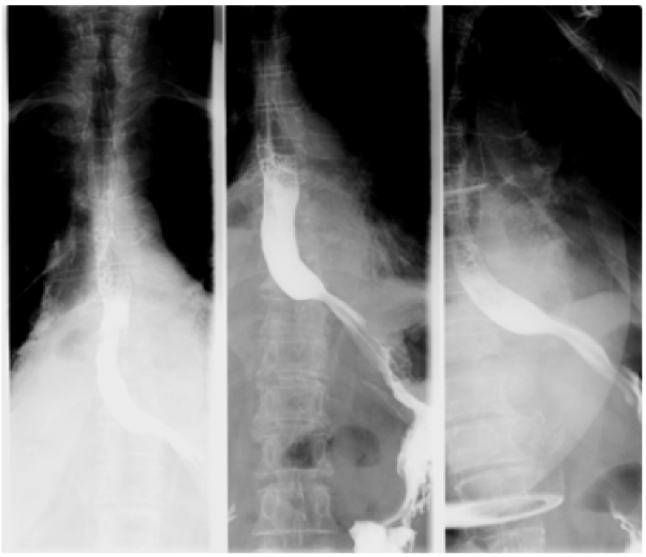

Figure 3
Postoperative Barium esophagogram showing successfully repair of hernia.

Herein the posterior diaphragmatic defect was reinforced with a V-shaped mesh (PROCEED® Surgical Mesh). A subsequent Nissen-Rossetti procedure (a 2 cm floppy 360° fundoplication without section of short gastric vessel) was performed. Blood loss was minimal and operating time was 180 minutes. There was no intra or postoperative complication. A favourable outcome was assessed by barium swallow radiograms performed on postoperative day 2 and the patient was able to tolerate a soft diet within 3 days after surgery and was discharged on the 10th day (Figure 3). At 9 months follow-up she has no complaints of heartburn, regurgitation or dysphagia.

Results

Complete resolution of the disease and of the symptoms.

Conclusion

This report confirms the feasibility, effectiveness of laparoscopic repair of a large hernia in the elderly. Moreover, a prosthesis must be used when defect's size precludes tension free repair. However, closure of the diaphragmatic defect with prosthetic material is not immune from the problem of erosion and migration.

Outcome depend more on surgeons possessing advanced laparoscopic skills and clinical experience.

In selected patients and properly managing the underlying medical problems, the laparoscopic surgery for hiatal hernia should not be refused solely on the basis of the age.