Prosthetic Esophageal Transmural Erosion After Mesh Hiatalpasty

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Introduction

Intrathoracic warp herniation from crural repair break-down is a well recognized complication of Nissen fundoplication1,2. To counter this problem, some surgeons recommend the use of mesh prosthesis to buttress the cruroplasty, both for open and laparoscopic hiatal repair2. Schols and Richards have strongly cautioned the use of mesh because of concerns of erosion and stricture3. In the adult population, there are reports of up to 26% intrathoracic warp migration rate after laparoscopic fundoplication and up to a 41% recurrent rate after laparoscopic paraesophageal hernia repair2. There are five reports in literature of mesh erosion after hiatal repair3.

Case Report

Identification
Female
68 years old,

Past medical history.
Asthma

History of present illness
She was submitted to anti-reflux surgery through laparoscopic (Nissen fundoplication) for hernia of the esophageal hiatus (type I). One year after the first surgery, for received hernia of the esophageal hiatus, the patient was submitted to laparotomy with placement of polietetrafluoroetileno (PTFE) prosthesis peri-esophageal and splenectomy by iatrogeny. Eight months after the last intervention, it falls back upon emergency room of São Marcos Hospital for dysphasia (for solids and liquids).

Complementary examination
She accomplished high digestive endoscopy that revealed transmural migration (Fig. 1) of the prosthesis into the distal esophageal lumen; Endoscopical extraction of the prosthesis was not possible.

Surgical treatment
Surgical correction in two times:
First time with prosthesis extraction (Fig. 2a, 2b e 3) and sub-total esofagectomy with esophageal exclusion, cervical esophagostomy and jejunostomy for feeding;
Second time almost total esofagectomy with retrosternal esophagocoloplasty.

Evolution
She was discharged home 41 days after the last surgery. Having developed a mild stenosis (Fig.4) of esophagoileocolic anastomosis, endoscopic dilatations and endoluminal prosthesis became necessary (Fig. 5).

Conclusion
The problem of esophageal mesh erosion must be approached surgically. Endoscopic removal should be attempted but may be unsuccessful if the mesh is well anchored in the esophageal wall. Although it is usually expected that extensive esophagogastric resection and reconstruction will be required.

References