

PICTURES IN DIGESTIVE PATHOLOGY

Successful endoscopic mesh removal after laparoscopic Nissen fundoplication

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CASE REPORT

A 72-year-old male was admitted because of dysphagia for solids and liquids. He had undergone a laparoscopic Nissen fundoplication due to erosive esophagitis and hiatal hernia. Three years later, due to symptomatic recurrence of the hernia, surgery with placement of a polypropylene mesh was indicated. After four years he developed epigastric pain and dysphagia for liquids. Gastroduodenoscopy showed a polypropylene mesh occluding almost all the esophageal lumen (Fig. 1). The symptoms worsened, with dysphagia for solids and liquids, with weight loss. First of all, we decided to remove the mesh endoscopically. A first attempt was done by exerting strong traction on the mesh with biopsy forceps without any result. At this point we looked for each one of the blue Prolene 3/0 (Fig. 2A) sutures and cut them with endoscopic scissors FS – 3L1 and FS – 5U - 1 (Fig. 2B) (Olympus, Tokyo, Japan). The mesh was extracted successfully in two



Fig. 1. A migrated mesh occludes almost completely the oesophageal lumen. Two blue Prolene 3/0 sutures can be seen.

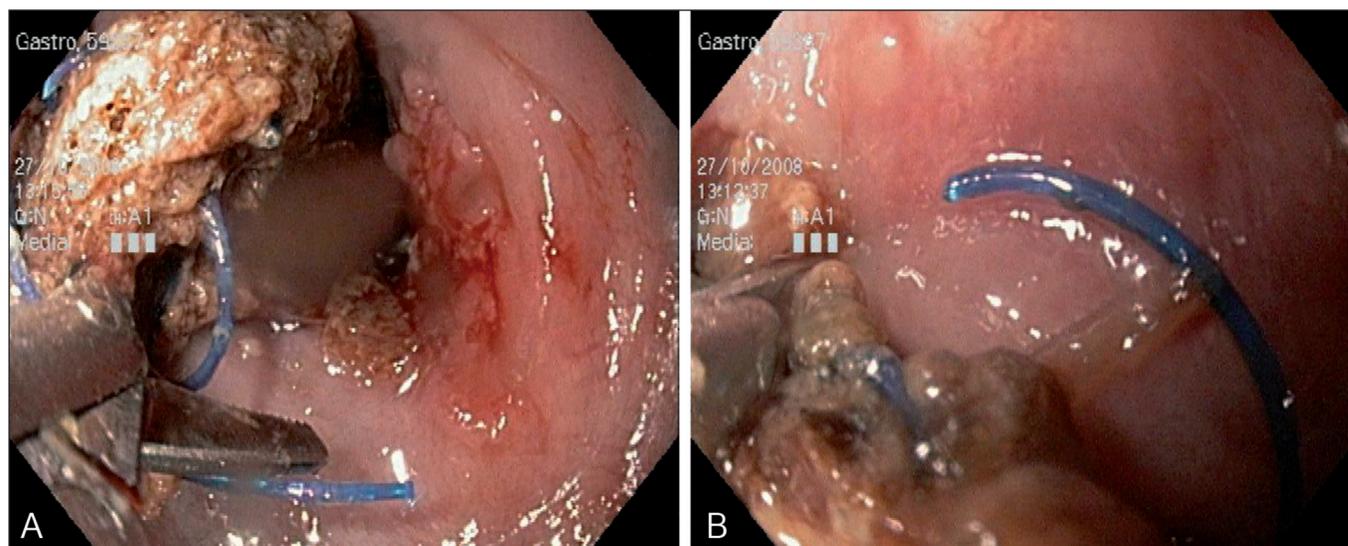


Fig. 2. Each one of the visible sutures were cut with endoscopic scissors FS – 3L1 and FS – 5U - 1 (Olympus, Tokyo, Japan).

fragments (Fig. 3). There were no complications related to the procedure.

DISCUSSION

Laparoscopic Nissen fundoplication is the most common surgical procedure performed for gastroesophageal reflux disease treatment. It has a high rate of success, but failure of the fundoplication is a major problem. Rupture and recurrence with simple suture is a possible complication, so mesh reinforcement has been an option in the last years. The risk of mesh erosion after prosthetic hiatal reinforcement is reported to be up to 2.3 % (1). The most common presenting symptoms are dysphagia, heartburn, chest pain, weight loss, and epigastric pain (2). The median time to onset of symptoms is 23.4 months (2). There are few cases reported of successful endoscopic removal of a migrated mesh. It seems like the best results are obtained by grasping the mesh with a foreign body forceps and cutting all the visible sutures using endoscopic scissors (3,4).

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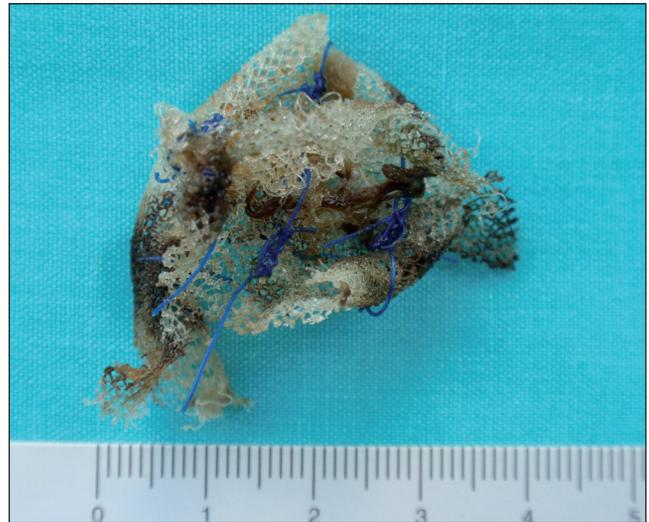


Fig. 3. Polypropylene mesh was completely removed.