Gastric mesh erosion after hiatoplasty for recurrent paraesophageal hernia

Fig. 1 The mesh eroded into the gastroesophageal junction.

Fig. 2 The mesh after removal.

A 57-year-old man was treated for recurrent paraesophageal hernia by means of laparoscopic hiatal reinforcement using a 12 × 10-cm titanium-covered polypropylene mesh. He began to experience non-specific epigastric abdominal discomfort 10 months later. An upper endoscopy revealed the presence of mesh at the gastroesophageal junction (● **Fig. 1**), which was then removed endoscopically, using grasping forceps (● **Fig. 2**). Since the procedure, the patient has been free of symptoms, with no signs of reflux disease for 12 months at the time of writing. According to the rationale of tension-free meshed hernia repair, the use of prosthetic materials for repair of the hiatus in large paraesophageal hernias is increasingly common. Prospective randomized trials have shown that the use of prosthetic materials for hiatal reinforcement results in a significantly lower rate of hernia recurrence [1]. It is known from the complications of inguinal and ventral hernia surgery [2] that

the main argument against mesh placement at the hiatus is the risk of visceral erosion. Statistically, the risk of mesh erosion after prosthetic hiatal reinforcement is reported to be up to 2.3% [3]. It is postulated that mesh migration is prevented when the mesh placement is protected by the fundic wrap and is not in contact with the esophageal wall [4].

Endoscopic treatment is an effective as well as safe method for removal of an eroding mesh. The use of an open surgical method is not necessary as long as the eroded organ wall is still intact without evidence of any leak. In order to ensure tension-free repairs of large hiatal hernias, the use of prosthetic materials is necessary; however, in our opinion, hiatal repair using mesh should only be carried out where appropriate, because of the risk of erosion

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