[Hiatoplasty reinforcement by means of a lightweight titanized polypropylene mesh fixed with fibrin glue]. [German]

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Abstract:

INTRODUCTION: Suture-based hiatoplasty is associated with a high recurrence rate. Using meshes of different shapes and materials to reinforce these sutures reduces the risk of recurrences. On the other hand morbidity attributable to the suture and tack fixation of these meshes has been observed during the development phase of these techniques. Moreover, there are some experimental and clinical data about mesh migration into the oesophageus. For this reason we analysed the outcome of our patients who underwent a mesh-reinforced hiatoplasty with a lightweight titanised polypropylene mesh fixed by fibrin glue.

PATIENTS AND METHODS: All the patients who under-went a mesh-reinforcement between 3 / 2006 and 12 / 2007 were collected retrospectively. The hiatoplasty was reinforced by means of a lightweight titanised polypropylene mesh that had been designed especially for that purpose (TiSure, GfE). Mesh fixation was performed with 2 mL of fibrin glue (Tissucol, Baxter). Postoperative data were elucidated for all patients via their general practitioner or by interviewing the patients by telephone using a dedicated questionnaire.

RESULTS: 26 patients with a median age of 58 years and a median BMI of 27.5 kg / m2 underwent laparoscopic mesh-reinforced hiatoplasty. There were 15 axial and 11 paraoesophageal hernias, in 5 cases with upside-down stomach and in 4 cases recurrent hernias. 15 patients underwent an additional dorsal 270degree-fundoplication, the remaining 11 patients had a

fundophrenicopexy, with conversion taking place in 2 cases. The median follow-up was 34.3 months. 3 patients suffered from dysphagia, 1 of them had to be re-operated and has been free of symptoms since then. 2 patients suffered from mild gastrooesophageal reflux which was treated conservatively. So far no mesh migration and no recurrences have been seen.

CONCLUSIONS: Despite the short observation time, this study indicates the patients are not exposed to any danger by the lightweight titanised polypropylene mesh. Moreover, the mesh appears to enhance hiatorrhaphy safety even in the presence of extensive hiatal hernias as well as in the case of an upside-down stomach.