

Abstract citation ID: doae057.511 511. IS IT SAFE TO USE NONABSORBABLE MESH IMPLANTATION FOR HIATAL REINFORCEMENT DURING PRIMARY ANTIREFLUX PROCEDURES? Yevhen Haidarzhi

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Background. Laparoscopic Fundoplication (LF) is highly effective in surgical treatment of GERD and the prevention of disease progression. Currently it is the gold standard of treatment and allows to achieve good and excellent postoperative results in majority patients. However, despite the gained experience, failures of primary LF and hiatus repair like hiatal hernia recurrence demonstrate that current surgical techniques are not optimal. One of the decisions is mesh implantation for hiatal reinforcement in GERD. However, due to the different types of complications (mesh erosion, scarring, dysphagia) safety use of mesh are still controversial.

Method. Laparoscopic Total Fundoplication (LTF) with nonabsorbable and composite light mesh implantation for hiatal reinforcement during 2022 – 2023 years were performed in 71 patients. We use macroporous nonabsorbable polypropylene or composite (polypropylene/monocryl) light mesh repair routinely by own proposed surgical technique. Our decision did not depend on size of hiatal hernia and hiatal surface area. We use U-shaped mesh posteriorly on the approximated crura by previous interrupted suturing not around the esophagus (Fig. 1). The mesh fixes with staples to the muscular and ligamentous structures of crura. We compared our results with the group of LTF without mesh implantation.

Result. All patients underwent completed validated questionnaires, esophagogasroduodenoscopy, contrast video esophagram, 24-hour impedance-pH monitoring after surgery. Some patients underwent computed tomography. Along with the disappearance of GERD symptoms, no mesh erosion and long (>3 month) postoperative follow-up dysphagia were marked in any patient with mesh repair. There are no significant difference in comparison with these results of LTF without mesh implantation. During the early postoperative period (< 12 months) no recurrence of hiatal hernia was diagnosed in the group with mesh implantation.

Conclusion. According to our study, in comparison with no-mesh repair, the proposed surgical technique is safe. Nonabsorbable and composite light mesh implantation for hiatal enforcement during primary antireflux procedures may be used routinely to prevent hiatal hernia recurrence effectively. Further, longer-term follow-up will be continued to confirm this position.

