Laparoscopic Hiatal Hernia Repair with RefluxStop: Outcomes in 30 Patients with a Minimal Follow-Up of 12 Months

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Background: Laparoscopic hiatal hernia repair with RefluxStop is an innovative technique to treat patients with gastroesophageal reflux disease (GERD). While feasibility and safety of this technique have already been demonstrated, consistent 12-months follow-up data is lacking.

Aims: To report 12-months outcomes and complications of a novel surgical anti-reflux technique with RefluxStop.

Methods: Among the 60 patients who underwent hiatal hernia surgery with RefluxStop since 2020 at our institution, we performed a retrospective chart review of the first 30 patients who achieved a minimal follow-up of 12 months. Follow-up data were reviewed until December 2022. Primary outcome was the clinical improvement of reflux symptoms in all patients.

Results: The median follow-up was 19.5 months (range, 13-31). Preoperatively, 23 patients (76.7%) presented with esophageal dysmotility, and the median length of the concomitant hiatal hernia was 4cm (range, 2-8). Mean GERD-HRQL score (0-75 points) was 37.6 ± 15.8 before surgery, 4.2 ± 7.1 at 3 months, and 4.4 ± 6.9 at 12 months (p<0.001). Three patients (10%) required postoperatively balloon dilatation due to persistent dysphagia. One patient experienced an asymptomatic partial migration of the implant, one patient presented with a recurrence of hiatal hernia after 2 years who required surgical repair, and in one case the implant was removed after 16 months to due persisting left thoracic pain.

Conclusions: This study confirmed excellent clinical outcomes beyond 1 year with significant improvement of reflux symptoms in all patients.