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Abstract

TITLE: TRANSORAL ANTERIOR FUNDOPLICATION (TAF) WITH MEDIGUS ULTRASOUND SURGICAL ENDOSTAPLER (MUSE) FOR THE TREATMENT OF GASTROESOPHAGEAL REFLUX DISEASE (GERD): 12-MONTHS RESULTS FROM A SINGLE-CENTER PROSPECTIVE STUDY

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ABSTRACT BODY:

Abstract Body : BACKGROUND AND AIMS: TAF with MUSE (Medigus, Omer, Israel) is a new endoscopic treatment for GERD. Aim of this study was to assess the safety of TAF with MUSE and its 12-month effects on clinical, pathophysiological and endoscopic results in PPI-daily dependence GERD-patients (pts).

MATERIALS&METHODS: TAF with MUSE was performed in a series of consecutive pts with symptomatic GERD responsive to PPI, in a single-center study. All pts undergone GERD-related quality of life (GERD-HRQL) and reflux symptom index (RSI) questionnaires, upper gastrointestinal endoscopy, high-resolution esophageal manometry (HRM) and 24h pH-impedance recording before TAF, 6 months and 12 months after TAF. The 6 and 12-month efficacy data were compared to baseline using Fisher's exact test for frequencies and Wilcoxon signed-rank test for nonparametric data.

RESULTS: Twenty-eight pts underwent TAF over a 12-month period (Male 17): 8 (29%) had grade A esophagitis, 3 (11%) Barrett's esophagus, and 17 (60%) NERD (pathological 24-h pH-impedance recordings). Hiatal hernia of 2 cm was present in 11 pts (39%). TAF was successful in all cases. Late (72 hrs after procedure) esophageal perforation occurred in one case (overall complication rate: 3.5%). One pts requested surgery three months after the endoscopic fundoplication for inefficacy of TAF on symptoms (drop-out). Twenty-one pts (75%) and fourteen pts (50%) completed 6 and 12-month clinical follow-up, respectively. Compared to baseline, median GERD-HRQL and RSI scores were significantly improved at 6 and 12-month after TAF and 74% and 79% of pts stopped PPI. Twelve pts (43%) and seven pts (25%) completed 6 and 12-month pathophysiological follow-up, respectively. Compared to baseline, 6 months after TAF there were a significantly lower number of total refluxes, recorded by 24h-esophageal impedance, and a significantly increase in length of lower esophageal sphincter, measured by HRM. Eighteen pts (64%) and eleven pts (39%) completed 6 and 12-month endoscopic follow-up, respectively. **CONCLUSIONS:** In our experience with TAF using MUSE, one case of severe complication occurred (3.5%). The 6 and 12-month data showed TAF effective, allowing significant improvement of symptom scores of GERD-HRQL and RSI questionnaires, withdrawal of PPI use in 74-79% of pts and a significantly lower number of total refluxes recorded by 24h-esophageal impedance.

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DISCLOSURE

The following authors have completed their 2018 DDW disclosure: Pier Alberto Testoni: Disclosure completed | Giorgia Mazzoleni: Disclosure completed | Giovanni Distefano: Disclosure completed | Sabrina Testoni: Disclosure completed | Mario Antonelli: Disclosure completed | Lorella Fanti: Disclosure completed | Sandro Passaretti: Disclosure completed