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Transoral Incisionless Fundoplication is a Safe and Effective Therapeutic Option for Refractory GERD: A 3-Year Retrospective Experience at a Quaternary Center

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INTRODUCTION

- Refractory GERD is seen in up to 40% of patients despite optimal therapy with acid-suppressing agents, including proton pump inhibitors (PPI) and H2 blockers (H2B).
- Such individuals may be candidates for invasive interventions.
- Transoral incisionless fundoplication (TIF) is a minimally invasive intervention, which can be performed alone or in conjunction with laparoscopic hiatal hernia repair (HHR).

AIM

To evaluate the technical and clinical success of TIF performed at a quaternary center in the management of refractory GERD.

METHODS

- IRB approved retrospective chart review of patients who underwent TIF alone or TIF with HHR (TIF+HHR) for refractory GERD from 2018 to 2021.
- Technical success was defined as completed procedures without major complications.
- Clinical success was measured by reduction in PPI and/or H2B use as well as symptom resolution quantified by the GERD Health-Related Quality of Life (HRQL) Questionnaire.

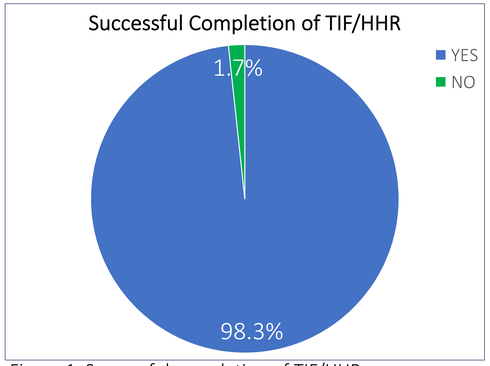

Figure 1. Successful completion of TIF/HHR.

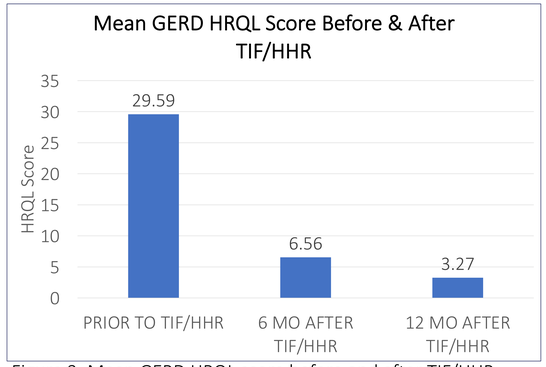

Figure 2. Mean GERD HRQL score before and after TIF/HHR.

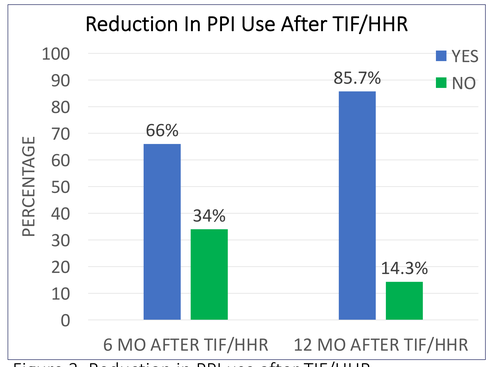

Figure 3. Reduction in PPI use after TIF/HHR.

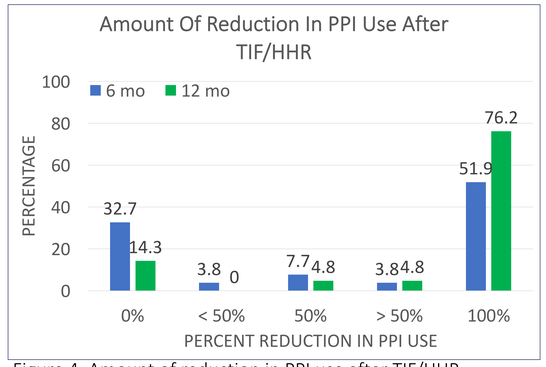

Figure 4. Amount of reduction in PPI use after TIF/HHR.

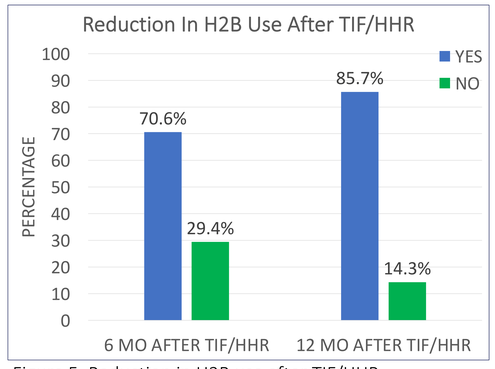

Figure 5. Reduction in H2B use after TIF/HHR.

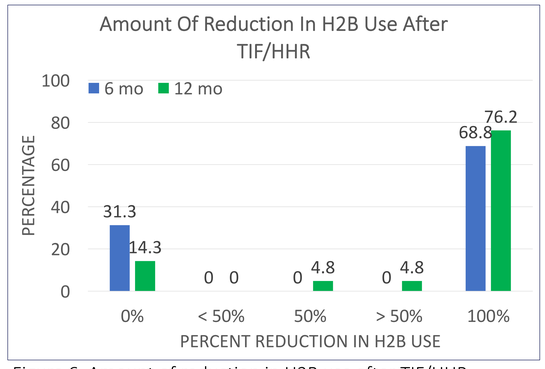

Figure 6. Amount of reduction in H2B use after TIF/HHR.

RESULTS

- 58 patients with a mean age of 55.7 years were included, of which 19% underwent TIF only, whereas 81% underwent TIF + HHR.
- Our technical success rate was 98.3%. There was only one patient in whom the procedure could not be completed as the TIF device was not able to be inserted even after esophageal dilation.
- Adverse events occurred in only 4 patients, including self-resolving oozing and superficial mucosal tears not requiring intervention.
- Preop mean HRQL score was 29.59 which decreased significantly to 6.56 and 3.27 at 6 and 12 months, respectively.
- 66% and 85.7% of patients reported reductions in PPI use at 6 months and 12 months, respectively.
- 70.6% and 85.7% of patients reported reductions in H2B use at 6 months and 12 months, respectively.

CONCLUSIONS

- Our study confirms that TIF is a viable treatment option in the management of refractory GERD.
- Similar to prior studies, we experienced high technical success rates with no major complications as well as clinical success with a majority of patients reducing or stopping PPI and/or H2B completely.
- In those who were unable to be titrated off acid suppression, postop evaluation suggested alternative diagnoses such as esophageal hypersensitivity or functional dyspepsia.

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