of multiple comparisons with Bonferroni correction, p value ≤.0001 was regarded as statistically significant.

Results: Prior to correction, 60 cases were considered abnormal, with a proportion of acid reflux time greater than 5%. However, 86 cases were considered normal. After correction, 11 out of the 86 normal cases was found to be actually abnormal. Further review of those patients identified a significant relationship between the abnormality of their impedance pH monitoring and the presence of symptoms. The American Journal of Gastroenterology, 109(11), 2014.

Introduction: Impedance pH monitoring is an important tool in the diagnosis and management of patients with gastroesophageal reflux disease (GERD). The Revised GerdQ was then calculated for 23 patients undergoing wireless pH testing (131 off PPI; 101 on PPI). Multivariate logistic regression models controlling for age, gender, and body mass index (BMI) were used to evaluate the association between functional GI symptoms, acid reflux, and symptom association probability (SAP) scores.

Results: Wireless pH-metry was completed in 131 patients off PPI and 101 patients on PPI (mean ± SD, 54 ± 12 years; BMI, 31.2 ± 7.8 kg/m²; 72.6% female). Abnormal acid exposure was noted in 39.7% of patients off PPI therapy and 11.9% on PPI. The AUCROC of the Revised GerdQ was 0.668 for patients off PPI and 0.533 on PPI. The AUCROC of the original GerdQ was 0.676 for patients off PPI and 0.520 on PPI. There was no significant difference between the two scoring systems in patients on and off PPI.

Conclusion: Revision of the GerdQ did not increase the predictive value of the scoring system for acid reflux in patients presenting to a tertiary care center for pH testing. This is likely a reflection of the recency of presentation of patients with GERD. It is unlikely that a GerdQ questionnaire will be able to reliably differentiate between those with and without acid reflux in this population. This study further demonstrates the need for pH testing in this population.

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Transoral Fundoplication Provides Better GERD Symptom Control Than PPIs in Patients With Troubleable Regelation: A Multicenter Sham-Controlled Randomized Clinical Trial

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Introduction: Transoral endoluminal fundoplication (TF) can decrease or eliminate gastroesophageal reflux disease (GERD) symptoms in selected patients with persistent symptoms on proton pump inhibitors (PPIs). We aimed to determine if TF provided better control of troublesome regurgitation than PPIs in patients with well-documented GERD.

Methods: The Randomized Endoscopy vs Sham, Placebo-Controlled Transoral fundoplication (RESPECT) trial was carried out at eight academic and community medical centers across the United States and was approved by the Institutional Review Board of each site. Six hundred ninety-six patients with troubleable regurgitation, despite daily PPI of at least 40 mg/day, were screened with 3 validated GERD-specific symptom scales. Scores were obtained on and off PPIs. Those with at least troublesome regurgitation (Montreal definition) on PPIs underwent barium swallow, esophagogastroduodenoscopy (EGD), 48-hr esophageal pH monitoring, and high-resolution esophageal manometry. One hundred twenty-nine patients with well-proven GERD and hiatal hernia (HH) ≥2 cm were randomized 2:1 to either TF and solids. Six months of placebo, or sham surgery and 6 months of daily or twice daily PPI (40 mg omeprazole). Patients were blinded to therapy during follow-up and were reassessed at 2, 12, and 26 weeks. At final analysis (6 months), patients were reassessed symptomatically and underwent testing with 48-hr esophageal pH monitoring and EGD. The primary endpoint study was the elimination of troublesome regurgitation, as assessed by the use of the reflux assessment using the reflux event database (REDBQ) at 6 month follow-up.

Results: Six months following operation, 54 of 80 (68%) of patients in the TF/placebo arm reported the elimination of troublesome regurgitation, compared to 17 of 37 patients (46%) of patients in the sham/PPI arm (p = 0.014). TF was associated with significant decrease in intragastric acid exposure in all parameters measured (p<0.05). In sham patients, no improvement in pH control was detected. With the exception of postoperative epigastric pain, complications and adverse effects were no different between TF and sham groups. Early treatment failure was more common in those randomized to sham surgery and PPI than in those randomized to TF and placebo. Dysphagia and bloating were improved in both groups.

Conclusion: TF plus placebo was more effective than a sham procedure plus PPI (qd or bid) in eliminating troublesome regurgitation for GERD patients enrolled with persistent troublesome regurgitation despite PPI therapy. We believe TF has a role in treating GERD patients with small or absent HH seen on EGD who suffer from troublesome regurgitation, despite PPI therapy.

Disclosure: Dr Kahabka has served as a consultant for Beckert Biostics, Astazeneca, and Pfizer. Dr. Huang received an honorarium as part of faculty for a surgical training course for Baxter. Dr. Hunter is a consultant for EndoGastric Solutions. Dr. Bell is a consultant for EndoGastric Solutions. Dr. Trad is a consultant for and has received a research grant from EndoGastric Solutions. Dr. Wilson received a research grant from EndoGastric Solutions, Apollo Endosurgery, Reshape Medical, and is a consultant for Apollo Endosurgery, Gore Medical and Ethicon. Dr. Oelschlager is a consultant for EndoGastric Solutions and has received research support from EndoGastric Solutions. Dr. Reavis is a consultant for EndoGastric Solutions. Drs. Melvin, Burch, Snyder, Perry, Soper and Turgum do not have any relevant financial relationships to disclose. This research was supported by an industry grant from EndoGastric Solutions (EGS).
Response: All 5 patients exhibited symptomatic, endoscopic, and histopathologic improvement with proton pump inhibitor and diet elimination therapy. Results are summarized in Table 1. Patient 4 had persistent distal esophageal eosinophilia after an elimination diet, however, his proximal esophageal locus as well as his endoscopic features normalized.

Conclusion: This small case series calls into question the premise that PPI-responsiveness precludes the diagnosis of eosinophilic esophagitis. Eosinophilic esophagitis, proton pump inhibitor-responsive esophageal eosinophilia, and gastroesophageal reflux disease are increasingly less distinct than suggested in the current clinical management paradigm. This study is limited by its retrospective design and small sample size. Seasonal fluctuations in disease activity may have influenced findings.

### Abstracts

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**Tubular Adenomatous Polyp in a Colon Interposition: A Case Report and Review of Literature**

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**Introduction:** We report a case of a 59-year-old male who had a history of Barrett’s esophagus with high grade dysplasia successfully treated with colon interposition. Upper endoscopy showed a tubular adenomatous polyp of the colonic segment.

Adena and adenocarcinoma can appear as a late complication in colonic tissue grafts used to substitute the esophagus. A 59-year-old white male with a history of Barrett’s esophagus diagnosed 24 years ago, underwent esophagectomy with colonic transposition (6 years ago) for high grade dysplasia. An esophagogastroduodenoscopy (EGD) procedure was performed using an Olympus video gastroscope. The pathology report of the polyp revealed a tubular adenoma. Colonic interposition had increased morbidity, compared with gastric transposition. Screening or surveillance for colorectal cancer is a crucial preventative measure. In addition to screening colonoscopy, clinicians should perform screening upper endoscopy in patients with history of colon interposition as pathology may arise from the colonic segment. Furthermore, in the review of literature (Figure 1), 15 out of 22 patients have developed adenocarcinoma in the grafted interposed colon. Our patient was fortunate enough to be diagnosed with tubular adenoma prior to the development of advanced cancer. The emphasis of our case is to continue screening and surveillance for colon cancer wherever colonic tissue is found.

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**Use of a Sleep Positioning Device Significantly Improves Nocturnal Gastroesophageal Reflux Symptoms**

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**Introduction:** Previous studies have demonstrated the effects of sleep positioning when treating patients with nocturnal gastroesophageal reflux disease (GERD). A recent study showed a decrease in nocturnal acid exposure and reflux episodes in healthy volunteers who slept using a sleep positioning device.