Methods: We performed a retrospective analysis of patients in a prospectively maintained database who underwent RFA for BE at a tertiary referral center from 2003–2013. We reviewed medical records for BE with distinct nodularity as identified on EUS reports. We analyzed for the outcomes of complete remission of dysplasia (CR-D) and intestinal metaplasia (CR-IM), defined as the absence of dysplasia and intestinal metaplasia respectively after two consecutive endoscopies with biopsies, and also evaluated for recurrence of dysplasia and metaplasia, disease progression, non-response, and death. Additionally we performed multivariate proportional hazards analysis adjusting for nodularity, EMR, and dysplasia grade for stated outcomes.

Results: The study included a total of 268 patients with 157 (58.6%) with nodular BE and 111 (41.4%) with non-nodular BE. Patient characteristics between the two groups were similar; however, those with nodular BE had a higher presenting grade of dysplasia (p < 0.0001) and all had pre-RFA EMR (p < 0.0001). CR-D and CR-IM subgroups. The high-grade dysplasia (HGD) subgroup was the largest (n=183) with 113 (61.7%) with nodularity and 70 (38.3%) without. Kaplan-Meier analysis showed no difference between nodular and non-nodular BE for this group for achieving CR-D, CR-IM (Figure 1) or recurrence. Survival was similar in both groups and aggregate multivariate proportional hazards analysis showed that outcomes were associated primarily with high dysplasia grade when adjusted for nodularity and EMR.

Conclusion: In this cohort of patients primary with BE with HGD treated with RFA, nodular BE had similar response to therapy as non-nodular BE. Nodular BE outcomes are mainly associated with pre-RFA dysplasia grade. Multivariate analysis showed neither a significant difference in outcomes in patients with nodular versus non-nodular BE, nor did pre-RFA EMR influence outcomes.

A Unique Case of Benign Esophageal Stenosis in a Patient With Rectal Cancer
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Introduction: Esophageal stricture is a relatively common adverse event related to radiation and chemotherapy in the setting of head, neck, and thoracic malignancies with an incidence rate ranging from 22% to 37%. Esophageal stricture resulting from chemotherapy alone is extremely rare. In this case, we report the occurrence of a benign esophageal stricture in a patient receiving chemotherapy for rectal cancer. A 55-year-old female was diagnosed with stage III-A rectal adenocarcinoma. She was treated with capecitabine and localized radiation therapy to the rectum for 2 months, followed by laparoscopic-assisted rectal resection, colonic J pouch with diverting ileostomy. Subsequently, she received adjuvant chemotherapy with oxaliplatin and fluorouracil. Two weeks after the initiation of chemotherapy, she was hospitalized for the management of dysphagia. Her symptoms persisted despite discontinuation of chemotherapy. Esophagogastroduodenoscopy revealed a long and irregular severe narrowing of the mid and distal esophagus. Upper endoscopic evaluation revealed a 6-cm long esophageal stricture with mucosal erythema and friability. Repeated biopsies and imaging failed to reveal any evidence of infectious or neoplastic etiology. Her symptoms improved post endoscopic dilation therapy, but she required repeated endoscopic therapy on a monthly basis. It is well known that esophageal stricture is a potential adverse event to radiation therapy designed to treat head, neck, and thoracic malignancies, especially when combined with systemic chemotherapy. Our patient developed progressive esophagitis with severe esophageal stenosis 3 weeks into her treatment with systemic chemotherapy using oxaliplatin and fluorouracil. Systemic chemotherapy-induced complication affecting the esophagus alone is a very rare entity, and it is only reported in the pediatric literature, mainly in patients treated for acute leukemia. Toxicity of 5-fluorouracil-based chemotherapy can be more pronounced with evidence of polymorphisms in the thymidylate synthase (TS) or dihydropteroamide dehydrogenase (DPD) genes. When DPD enzyme activity is low, the gastrointestinal mucosal involvement can be severe and, in rare cases, fatal. Low levels of TS expression are associated with toxicity to 5-fluorouracil. Surprisingly, both enzymatic activity were within normal limits when studied in our patient. We report a case of acute gastrointestinal toxicity limited to the esophagus after initiation of systemic chemotherapy in a patient with normal thymidylate synthase (TS) and dihydropteroamide dehydrogenase (DPD) assays. Therefore, the possibility of other genetic mutations leading to this complication should be investigated in future studies.

Weak or Frequent Failed Peristalsis: No Difference in Outcome After Paraesophageal Hernia Repair
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Introduction: Prior to the high resolution esophageal manometry Chicago classification criteria (2012), patients with “weak peristalsis” and “frequent failed peristalsis” may have been categorized as having long transition zones, ineffective esophageal motility, hypotensive peristalsis, or even as normal. Even though weak and frequent failed peristalsis are thought to be minor peristaltic abnormalities, there is little documentation of the potential effect of these findings during the performance of a traditional fundoplication. We hypothesize that patients who are categorized as having weak or frequent failed peristalsis and undergo standard paraesophageal hernia repair will experience no more dysphagia or peristaltic abnormalities on barium swallow than those patients with normal peristalsis on manometry.

Methods: We performed a retrospective chart review of all patients undergoing paraesophageal hernia repair between January 2009 and December 2011. Patients were included if they had preoperative manometry and pre- and post-operative (at least 6 weeks after surgery) clinical visits and barium swallow studies. Manometry studies were re-analyzed using Chicago classification criteria and were classified as normal, weak peristalsis, frequent failed peristalsis, or other. Patients with decreased distal latency but with propagating peristalsis and esophageal shortening (n=4) were not classified as esophageal spasm, as this finding is likely due to the short esophageal length. The data were re-analyzed excluding these patients and the results were similar. Dysphagia was classified as present or absent. Barium swallow studies were classified as normal or abnormal. Barium studies with esophageal motility reported as near normal, minimally abnormal, or mildly abnormal (per the radiologist at the time of the study) were counted as normal.

Results: All patients underwent primary open or laparoscopic paraesophageal hernia repair without Collins procedure or hiatoplast mesh reinforcement. Preoperative manometry showed normal peristalsis (n=31), weak peristalsis (n=10), frequent failed peristalsis (n=9), or other. Postoperative dysphagia was noted in 2/31 (6%) of the normal group, 1/10 (10%) of the weak group, and 1/9 (11%) of the frequent failed group (p=0.87 by Chi Square analysis, p=0.61 by logistic regression). Abnormal esophageal motility seen on barium swallow occurred in 10/31 (32%) of the normal group, 1/10 (10%) of the weak group, and 3/9 (33%) of the frequent failed group (p=0.37 by Chi Square analysis, p=0.73 by logistic regression).

Conclusion: Patients with weak or frequent failed peristalsis on high resolution manometry do not have any different outcome after primary paraesophageal hernia repair than those with normal manometry.

Endoluminal Stenting for Benign and Malignant Esophageal Leak: Is There a Difference in Outcome?
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Introduction: Esophageal perforation after endoscopy or surgery, as well as anastomotic upper GI leaks can lead to devastating consequences. Surgery, as well as conservative treatment often is associated with high morbidity and mortality. In the era of advanced endoscopy, minimally invasive options of treatment can be offered with stent placement. However, patient with leak secondary to underlying malignancy can have less favorable outcomes compared to patient with leak from benign cause.

Methods: Retrospective chart review was performed to obtain data for the patients who underwent upper gastrointestinal leaks treated with endoluminal placement of temporary self-expandable stents from January 2006 - September 2013. Two major types of stents, plastic (placed between 1/2006 to 1/2010) and fully covered metallic (placed between 2/2010 to 9/2013) were used. The outcome of patients with leak due to benign causes (which include spontaneous perforation, iatrogenic and post gastric bypass) was compared with leaks secondary to underlying malignancy (which include underlying malignancy as a cause of leak or leak after the surgery for malignant resection). Logistic