Unraveling Esophageal Eosinophilia in Veteran Population
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Purpose: Eosinophilic esophagitis (EoE) is a chronic inflammatory disorder of esophagus affecting children and adults and requires 15 eosinophils/hpf for pathological confirmation. Clinical and endoscopic features of esophageal eosinophilia among elderly veterans and the implications of lower esophageal eosinophilia (<15 cells/hpf) are largely unknown. Our aim was to study the prevalence of EoE among veterans with food impaction and non-obstructive dysphagia and to compare the clinical and endoscopic features of esophageal eosinophilia with and without EoE.

Methods: All the patients with esophageal eosinophilia during 2005 to 2011 were abstracted from the pathology database of a tertiary care VA hospital. These patients were categorized as EoE, if they had ≥15 eosinophils/hpf of the esophagus and eosophageal eosinophilia group if they had <15 eosinophils/hpf. All the patients undergoing upper endoscopy were queried for food impaction and non-obstructive dysphagia from the endoscopy database during the same period to identify the prevalence of EoE. Patients with other causes of esophagitis (pill induced, radiation, post ablation and acid reflux with classic LA grades of esophagitis) were excluded. Fischer’s Exact and Mann-Whitney tests were used for categorical and continuous variables, respectively.

Results: The mean eosinophil density in the EoE (n=26) and the esophageal eosinophilia (n=22) groups were 28.6±22 and 8.6±4.0, p=0.001 respectively. The prevalence of EoE was 8% in patients with food impaction (n=75) and 1.1% in those with non-obstructive dysphagia (n=1708). The prevalence of esophageal eosinophilia (excluding EoE) was 2.6% in patients with food impaction and 1.1% in those with non-obstructive dysphagia. Patients with EoE and esophageal eosinophilia had similar demographics-mean age (53.5 vs 60.5%, p=0.5), gender (81% vs 90.9%, p=0.6) and Caucasian race (69.3% vs 68.2%, p=1.0) and also had similar prevalence of food impaction (23% vs 9.1%, p=0.3), history of allergies (19.1% vs 22.7%, p=1.0), peripheral eosinophilia (26.9% vs 18.1%, p=0.5) and rings (46% vs 54%, p=NS).

Conclusion: Compared to the published literature, EoE appears to be less prevalent in veterans with food impaction and non-obstructive dysphagia. Important clinical and endoscopic features were similar between patients with EoE and esophageal eosinophilia without EoE. This subgroup of patients with esophageal eosinophilia that is milder than EoE may have similar clinical pattern and needs to be further studied.

Figure 1.

Reliability of Upper Endoscopy for Diagnosing Hiatal Hernia in the Setting of Preoperative Testing for Laparoscopic Adjustable Gastric Banding
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Purpose: A significant hiatal hernia (HH) is considered to be a relative contraindication to placement of a laparoscopic adjustable gastric band (LAGB). Accurate preoperative evaluation of a HH is essential to surgical planning and informed consent. The purpose of this study was to examine the utility of routine esophagogastroduodenoscopy (EGD) in diagnosing a HH when compared to operative assessment of a HH in patients undergoing LAGB.

Methods: Eighty-six consecutive patients undergoing LAGB received a preoperative EGD to assess for an endoscopic HH (eHH). All patients then underwent intraoperative assessment of the HH (oHH) by both localization of the gastroesophageal junction (GEJ), as well as visual and mechanical evaluation (with a calibration tube) of crural separation anterior to the esophagus. All HH 1cm or larger were considered significant and underwent repair with adequate esophageal mobilization and cruralplasty. Given the dual methods utilized intraoperatively, the diagnosis of HH in this setting was considered to be definitely diagnostic. Preoperative endoscopy was performed by five gastroenterologists, one of whom was involved in 77% (66/86) procedures. A single surgeon performed all operations. Preoperative assessment and intraoperative assessments to diagnose HH were compared for correlation and accuracy.

Results: The overall incidence of oHH was 38.4% (33/86) while only 20.9% (18/86) had a preoperative diagnosis of eHH based on EGD (p=0.01). The calculated sensitivity of EGD for detecting HH was 0.36, and the specificity was 0.89. The positive predictive value (PPV) of eHH was 0.67, and the negative predictive value (NPV) was 0.69. All hernias were sliding type and all were repaired except one at the time of operation.

Conclusion: There is a disparity between the number of HH detected endoscopically (eHH) as compared with operatively (oHH). EGD appears valuable for excluding a HH when it is truly absent (high specificity), but remains a poor tool to detect HH when present (poor sensitivity). Given that many HH are not detected until the time of the operation, almost 50% in this study, the benefit of preoperative EGD is limited. Making clinical decisions prior to surgery on the basis of an eHH remains difficult as endoscopic findings are only predictive approximately two-thirds of the time. In the context of an overall rate of eHH of nearly 40% and controversy regarding LAGB placement in the presence of HH, the value of preoperative endoscopic detection of a significant HH remains poor.

Role of Measuring Proximal Reflux Events in the Evaluation of Patients with Upper Esophageal/Pharyngeal Symptoms

Purpose: Upper esophageal/pharyngeal symptoms such as hoarseness and chronic cough are commonly attributed to gastroesophageal reflux. There is an increasing demand from ENT physicians to assess the presence of proximal reflux events. It is unknown if these symptoms are related to reflux. Whether identifying these events will confirm reflux as a cause of these symptoms is unknown. Objective: To determine 1) whether a higher rate of proximal reflux events is found in patients with upper esophageal/pharyngeal symptoms compared to patients with lower esophageal symptoms and 2) whether there is less evidence of reflux by number of reflux events or acid exposure on pH/impedance testing in patients with upper esophageal/pharyngeal symptoms than those with lower symptoms as might be expected if upper symptoms are unrelated to reflux.

Methods: A retrospective review of pH/impedance studies in a single center between May 2010 and November 2011 was performed. Subjects with mixed