Overall migration rate of EES is high, >50%, and despite common perception, does not predict sufficient resolution of benign esophageal strictures.

Disclosure - Dr. Shub: Consultant, Cook Medical, Unrestricted Educational Grant Boston Scientific.

18

Unexpected Candidiasis in the Endoscopically Normal Esophagus
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Purpose: Candida esophagitis is usually characterized endoscopically by diffuse raised plaques, erosions, and more rarely ulcers. This study was designed to: 1) determine the prevalence of fungal esophagitis in patients with an endoscopically normal esophagus, and 2) to compare the demographic and clinical characteristics of such patients to those of patients with endoscopic esophageal abnormalities.

Methods: From the Miraca Life Sciences database we extracted pathologic, demographic and clinical information from all patients with esophageal biopsies and a diagnosis of fungal esophagitis (1/2008-6/2012). We reviewed the endoscopic report for those who had a diagnosis of esophagitis and those with an endoscopically normal esophagus. Patients whose endoscopic report did not mention the esophageal findings were excluded. Histologic slides from all cases were reviewed. The demographic and clinical characteristics of the two groups were then compared using the t-test and odds ratios.

Results: There were 399,878 patients with esophageal biopsies; 7,837 patients had a histopathologic diagnosis of Candida esophagitis (median age 62 years; 57% female). The esophagus was not mentioned in the report of 225 patients, who were excluded. Abnormalities were reported in the esophagus of 7,286 patients (median age 62 years, range 1-98; 58% female); a normal esophagus was reported in 126 patients (median age 52 years, 2.47; 73% female). Thus, patients with candidiasis and no reported endoscopic esophageal lesions were 10 years younger (p<0.001) and more likely to be female (odds ratio [OR] 1.95; CI 1.31-2.90, p<0.001). Compared to those with esophageal abnormalities, patients with a normal esophagus were significantly less likely to present with dysphagia or odynophagia (21% vs. 33%; OR 0.65 95%CI 0.36-0.85), but more likely to have dyspepsia (13% versus 10%; OR 1.57 95%CI 1.02-2.48) and abdominal pain (37% vs. 26%; OR 1.67 95%CI 1.16-2.40), and slightly more likely to have GERD (33% vs. 28%). Approximately half of the cases showed invasive hyphae with associated neutrophilic inflammation, while the remaining cases showed invasive hyphae with occasional eosinophils or no active inflammation.

Conclusion: Almost 2% percent of patients with histologically documented fungal esophagitis had a normal esophagoscopic appearance. Compared to those with esophageal lesions, these patients, none of whom was known to be immunocompromised, were younger, more often women, and more likely to present with dyspepsia and abdominal pain than dysphagia; thus, the clinical suspicion for candidiasis was likely very low. In summary, fungal esophagitis can be expected in a small proportion of immunocompetent patients with an endoscopically unremarkable esophagus.

19

Influence of Reflux and Central Adiposity on Intercellular Space in Squamous Esophageal Epithelium

AGC Obesity Award
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Purpose: Central adiposity is associated with esophageal inflammation, metaplasia and neoplasia independent of gastroesophageal reflux and BMI. Mechanisms by which central adiposity may potentiate reflux and esophageal squamous epithelium intercellular space diameter in patients with increased central adiposity independent of esophageal reflux.

Methods: Subjects who underwent clinically indicated ambulatory 24-hour pH impedance studies and endoscopy within 48 hours were prospectively recruited. Anthropometric measurements (height, weight, waist circumference, hip circumference) were obtained using standard methods. Biopsies were divided into the four groups outlined in Table 1. Post-processed images were obtained randomly from the basal and spinous layers. Thirteen subjects were prospectively recruited. Four (33%) were males. Mean age (SD) was 43.4 (16.9). Group 2, (centrally obese without reflux), had a statistically significant larger ICS diameter than the control group (no central obesity, no reflex) (0.503 μm). The difference between the reflux group and control was 0.223 μm. There was no statistically significant difference between the ICS diameters of groups 2, 3, and 4. Our ICS difference between reflux and non-reflux patients was consistent with the data in the literature.

Conclusion: In this study, we found that subjects with increased BMI and central obesity but no evidence of pathologic reflux on ambulatory pH monitoring, had dilated ICS. The ICS is a marker for GERD. The ICS dilataion was almost twice the size of the control group (normal BMI and no reflux). Moreover, this was similar to that of subjects with pathologic reflux in the absence of obesity (normal BMI and WHR). This change may potentially increase vulnerability of centrally obese subjects to epithelial injury, inflammation and neoplasia.

20

Medicinal Prevention of Barrett’s Esophagus: Effects of Calcium and Multivitamins
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Purpose: Barrett’s esophagus (BE) is a complication of gastroesophageal reflux disease (GERD) that is a precursor to esophageal adenocarcinoma. There is limited information suggesting that calcium and some vitamins can be protective against certain malignancies. However, the relationship between calcium, multivitamins, and their effects on the risk of developing BE has not been defined. We analyzed medical records at a large veterans hospital to determine the effects of these substances on the risk of developing BE.

Methods: In this retrospective case-control study, 250 patients with biopsy confirmed Barrett’s esophagus were compared with 250 controls with acid-peptic symptoms but no endoscopic BE. All patients were identified from medical records at the Phoenix Veterans Affairs (VA) Hospital. Medication histories were reviewed to determine which patients were taking calcium or multivitamins prior to their endoscopic evaluation. Logistic and linear regression were used to determine predictors of the outcomes.

Results: A total of 38 women (eight cases and 30 controls) were initially included in the data, but then dropped to improve the homogeneity of the sample. Mean age at diagnosis was significantly older in the Barrett’s population compared with controls (61 vs. 57 years, P<0.001), with no difference in mean BMI (28.7 vs. 28.9, respectively). On multivariate analysis, independently significant factors for risk of BE were found with use of calcium (odds ratio 0.467, P=0.036), multivitamins (OR 0.349, P<0.001) and age at diagnosis (odds ratio [OR] 1.041/year, P<0.001). Age at diagnosis was associated with increased BE length (0.06 cm/year, P=0.006).

Conclusion: The usage of both calcium and multivitamins appear to be associated with diminished risk of developing BE. The benefit of multivitamins would presumably lie within their antioxidant effect. Calcium may bind bile acids and fatty acids, reducing their proliferative effect on epithelial cells. Prospective studies of this topic are indicated.

21

Malignant Extra-renal Rhabdoid Tumor (MERT) of the Gastrointestinal Tract: A Systematic Review
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Purpose: A 61-year-old female presented to us with metastatic Malignant Extra-renal Rhabdoid Tumor (MERT) of the gastrointestinal tract, which prompted us to conduct a systematic review of the literature.

MERT is a rare entity that carries a poor prognosis due to its features of early metastasis and rapid growth.

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