type 1, 7/7; PRCC-NFC, 3/3; TRAC, 1/3). AMACR (CCPRCC = 2/6; PRCC type 1 = 4/4; TAC = 3/3; PRCC-NFC = 2/2) and CA-IX (CCPRCC = 5/7) expression was variable. All TRACs were positive for TFE3 (3/3).

**Conclusion:** PRECs are a heterogenous group of neoplasms, comprising varied morphologic subtypes, yet with some overlapped histology. Further studies are needed for proper characterization of these tumors.

**Clinicopathologic Correlation of Initial and Revisional Sleeve Gastrectomy Procedures**

Ryan Cristelli,1 Andrew Wassef,1 Ragui Sadek, MD, FACS,1 and Evita Sadimin, MD,2 1Robert Wood Johnson Medical School and 2The Cancer Institute of New Jersey

**Objectives:** The purpose of this study was to correlate histological changes of initial and revisional sleeve gastroctomies with clinical findings.

**Methods:** We performed a retrospective analysis of all 15 patients who underwent initial and revisional gastric sleeve resections in the last 7 years at our institution. Mucosal, submucosal, and muscularis propria thickness are correlated to weight, body mass index (BMI), changes in BMI, and resolution of disease states, including hypertension (HTN), hypercholesterolemia (HCL), diabetes (DM), and obstructive sleep apnea (OSA).

**Results:** The average ages of the eight female and seven male patients were 39 years at initial gastrectomy and 43 years at revision. The average BMI at initial resection was 44.3 and at revision was 39.4. No cases had significant inflammation or unsuspected pathologic findings. The mucosa showed changes in the parietal (average change: −0.1 mm, P = .03) and chief cells layers (average change: 0.12 mm, P = .03). Correlated to a change in BMI is a decrease in gastric pit thickness (correlation: −0.64, P = .01) and submucosal thickness (average change: −1.3 mm, P < 0.01, correlation:0.56, P = .03). Postgastrectomy, the circular and oblique layers of the muscularis propria increased by 0.3 mm each (P = .02, P < .01, respectively), and the overall musculature increased by 0.7 mm (P < .01). Within the revision cases, the submucosal thickness correlated with both the weight (0.55, P = .04) and BMI (0.62, P = .02), and the circular muscular layer correlated to BMI (0.55, P = .05). There were no significant associations observed with resolution of HTN, DM, OSA, and HCL.

**Conclusion:** The oblique layer thickness of the muscular wall was decreased in patients with a higher BMI, while the parietal and chief cell layers were redistributed without an increase in mucosal thickness. Once patients underwent a revisional sleeve gastrectomy, the oblique and circular muscular layers thickened. The alterations in submucosal thickness were associated with change in BMI.

**Detection of Cytomegalovirus in Inflammatory Bowel Disease: A Retrospective Study**

Fengming Chen, Yongjun Liu, and Francesca Ruggiero; Penn State Milton S. Hershey Medical Center

**Objectives:** Cytomegalovirus (CMV) reactivation may exacerbate IBD and is associated with worse clinical outcome. Reported remission rate ranges from 67% to 100% after antiviral therapy. Histologic examination of the inflamed colon tissues, including H&E and immunohistochemistry (IHC), is considered the gold standard for diagnosing CMV colitis. Currently, there is no consensus on when to order CMV IHC, and the prevalence of CMV colitis in UC and Crohn disease patients was variable in different studies. In this study, we aimed to investigate (1) whether IHC may improve the CMV detection rate in IBD patients with moderate to severe inflammation and (2) the frequency of CMV positivity in patients with ulcerative colitis vs Crohn disease.

**Methods:** We retrospectively reviewed our pathology database at Penn State Hershey Medical Center to identify colon biopsy and resection specimens performed in adult IBD patients with moderate to severe chronic active inflammation from July 1, 2016, to May 31, 2017. The H&E slides and IHC slides were re-reviewed. Fisher’s exact test was performed to compare the frequency of CMV positivity between UC and Crohn disease patients.

**Results:** The study included 202 colon specimens, comprising 68 specimens with UC, 132 with Crohn disease, and 1 with indeterminate IBD. Among them, 18 IHC tests were ordered in UC patients (18/68 = 26.5%) and 38 IHC tests were ordered in patients with Crohn disease (38/132 = 28.8%). IHC tests were positive in 3 UC patients (3/18 = 16.7%), but only 1 of them showed overt viral inclusion obvious on H&E. IHC tests were all negative in patients with Crohn disease (0/38 = 0%). Fisher test showed the frequency of IHC positivity is higher in UC patients with moderate to severe colitis vs Crohn disease.

**Conclusion:** Our study demonstrated IHC can enhance CMV detection in inflamed colon tissues in IBD patients, especially in tissues with rare CMV-infected cells. Inconsistent with some other studies, we found patients with UC have a higher CMV infection rate than those with Crohn disease.

**Tumor-Infiltrating Lymphocytes in Metastatic Lung Cancer to the Brain**

Makinzie Mott, MD, and Hope Richard, MD, PhD; Virginia Commonwealth University Health

Tumor-infiltrating lymphocytes (TILs) are an important component of the adaptive immune system tasked with combating neoplastic processes. These cells have been