no standardized guidelines for histologic grading of severity in MC. Our aim is to establish histologic grading criteria that can reliably distinguish clinically mild from severe cases of MC.

Methods: We reviewed 10 patients who are part of a prospective MC patient registry at the North Shore University Health System. Clinically mild disease was defined as <6 BMs per day and no incontinence, and clinically severe disease with ≥6 BM per day and incontinence. A single pathologist was blinded to severity and reviewed all pathology reports.

Results: We identified 5 patients with clinically mild and 5 patients with clinically severe disease. Those with mild disease had less than 6 BMs per day, no incontinence, and had weight loss. In contrast, those with severe disease had ≥6 BMs per day, all had nocturnal stools and incontinence, and 3/5 cases had weight loss. All 10 cases had similar degrees of intraepithelial lymphocytosis, quantity and quality of lamina propria inflammatory cell infiltrate and no histologic evidence of chronic injury (i.e., preservation of crypt architecture and no Paneth or pyloric gland metaplasia). In addition, those with both mild and severe CC had a thick normal collagen layer with separation from the surface epithelium. The following differences were found: the location of epithelial inflammatory cells was found in both the crypt and surface in 4/5 mild cases, whereas this was limited to the surface in the 4/5 cases of severe disease. Evaluation of the surface epithelium in mild cases demonstrated epithelial flattening only in 1/5, flattening with loss of mucin in 2/5, flattening with loss of mucin and presence of vacuolization in 1/5, no epithelial injury in 1/5. In severe cases flattening with loss of mucin was seen in all 5 cases with no vacuolization. In addition in 2/5 severe cases the epithelium appeared to look as healing erosions. Capillaries, fibroblasts, eosinophils, neutrophils within an abnormal collagen layer was seen in all cases of CC, however the degree was more pronounced in those with severe disease compared to mild disease. Lastly, one patient who the pathologist felt had a severe LC based on 3+ intraepithelial lymphocytosis had clinically mild disease.

Conclusions: In this pilot study, we identified possible histologic differences in patients with mild versus severe disease activity in microscopic colitis. In our population, degree of intraepithelial lymphocytosis did not distinguish between mild and severe patients. However, preferential location of epithelial inflammatory cells near the surface, presence of inflammatory infiltrate within a collagen layer, and surface epithelial injury with healing erosion tended to predict more severe disease activity. Further prospective studies are now being undertaken to determine histologic criteria for the purposes of informing disease activity in addition to developing more rigorous histologic endpoints for clinical trials in microscopic colitis.

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Investigation of Mismatch Cases Between Magnetic Resonance Enterocolonography and Endoscopy in Intestinal Lesion of Patients with Crohn’s Disease


Background: Clinical needs for detect mucosal healing is increasing today because medical treatment for CD has advanced and its prognosis has improved. Although standard method to detect mild lesions is endoscopy, it has some limitation due to complications. The usefulness of magnetic resonance enterocolonography (MREC) to detect active lesion such as ulcer is established. However, whether MREC is able to detect mild lesions such as erosion or redness and which intestinal lesions tend to be different among MREC and endoscopy are unknown. The aim of this study is to compare the consistent lesions between endoscopic diagnosis and diagnosis by MREC.

Methods: This study was cross-sectional single center study. Patients enrolled in this study were Crohn’s disease patients who received endoscopy and MREC at the same period. Colon was divided into 6 sections, and intestinal lesions were classified to redness, erosion, and ulcer based on the depth in endoscopy. We assessed wall thickness, wall signal intensity, relative contrast enhancement (RCE), and diffusion weighted image (DWI) on MREC. Results: Total number of patients was 27 (Male 18, Female 9), average age was 36.4, average CDAI was 143.8. There were 55 and 46 lesions on endoscopy and MREC respectively, and lesions tended to be at terminal ileum and Sigmoid colon. Fistula was detected in 2 cases. The sensitivity of MREC referred to endoscopy was ulcer; 70% to 90%, erosion; 50% to 70%, and redness; 30% with single MREC finding, and detection rate for erosion was 85% in combination of these MREC findings. There were 30 inconsistent lesions, 10 observed by endoscopy only (ulcer: 0, Erosion: 2, and redness: 8) and 20 observed by MREC only (wall thickness: 4, edema: 3, DWI: 7, RCE: 13).

Conclusions: (1) Deep mucosal lesions were well detected by MREC. The detection rate by each of MREC finding for endoscopic findings of erosion or redness was not high, but detection rate for erosion became high if we admitted positive when at least one of MREC finding was observed. (2) Superficial lesions were hard to detect by MREC. RCE had high false positive rate if we assume endoscopy as reference. In order to clarify whether false positive findings of MREC were true lesions or not, prospective study should be planned.

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Does Vedolizumab Affect Postoperative Outcomes in Patients Undergoing Abdominal Operations for Inflammatory Bowel Disease?

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Background: Vedolizumab (Entvyxo™, Takeda Pharmaceuticals America, Inc., Deerfield, IL), a humanized monoclonal antibody to α4β7 integrin, which inhibits lymphocyte trafficking in the vasculature of the gastrointestinal tract, was approved by the FDA for patients with moderate to severe ulcerative colitis (UC) and Crohn’s disease (CD) in 2014. Although clinical trials addressing the drug efficacy for UC and CD did not suggest an increased risk of any infections or serious infections compared to placebo, no study to date has examined the risk of postoperative infectious complications among patients who received vedolizumab in the perioperative period. The possible impact of medical therapy is an important consideration in determining operative timing, approach, and the need for fecal diversion.

We sought to determine the 30-day postoperative infectious complication rate.