

Healthcare System



## Introduction

The pathophysiology and epidemiology of lymphocytic colitis (LC), a form of microscopic colitis, is not well understood. The incidence of this disorder in some populations has increased over time, nearing that of inflammatory bowel disease (IBD). Medications, autoimmune conditions (i.e celiac disease), infectious etiologies, and genetics have been proposed as predisposing to or triggering LC. Of the reported bacterial pathogens, Vibrio species has not yet been linked to LC. We report a case of LC diagnosed post-infection with Vibrio spp.



A 68-year-old male with a past medical history of GERD, Gilbert's syndrome, HLD, CAD, Anxiety, and BPH presented with 16 days of watery diarrhea. He reported 8-12 daily diarrheal episodes with associated fecal incontinence and abdominal cramping. Symptoms began one day after consumption of raw clams and oysters. Abdominal exam was benign and without tenderness, masses, or organomegaly.

Initial labs including CBC and CMP were normal. Microscopic stool analysis revealed a positive fecal leukocyte stain and stool PCR was positive for *Vibrio Cholerae/Parahaemolyticus*. He was treated with tetracycline with negative follow-up stool cultures but minimal symptomatic improvement. Further workup ruled out C. Diff and celiac disease. Post-infectious inflammatory bowel syndrome (IBS) was suspected, for which he was started on a low FODMAP diet and dicyclomine. Despite reported compliance, his symptoms did not improve. Subsequent colonoscopy revealed a grossly normal ileum and colon [Figures 1 and 2]. Colonic biopsies depicted colonic mucosa with mildly increased intraepithelial lymphocytes, consistent with lymphocytic colitis [Figures 3 and 4]. Treatment with an oral budesonide taper was initiated and diarrhea resolved after 2 weeks of treatment.

## Vibrio Species Infection Followed by New Onset Lymphocytic Colitis: Cause or Coincidence? Medjine Jarbath, MD; Gregory Rouan, MD, MACP, FRCP Department of Internal Medicine, Naples Community Hospital, Naples FL

## Case Presentation





The temporal nature of Vibrio spp. infection raises the question of causality of LC. H. Pylori, Yersinia, and C. Diff have been linked to collagenous colitis. Thus far, the only pathogen linked to LC is Campylobacter jejuni. Medications including statins, PPIs, and SSRIs have also been associated with LC. Moreover, PPI use may predispose to Vibrio infection due to hypochlorhydria. Post-infectious IBS and new onset LC raises an interesting pathophysiologic link as both conditions are clinically similar.

While the exact mechanism of post-infectious LC is unknown, upregulation of nitric oxide synthase is seen in both infection with Vibrio and LC. Further clarification and investigation are yet required to define the pathogenesis of this disorder.

