Collagenous Duodenitis and Collagenous Colitis: A Short Clinical Course as Evidenced by Sequential Endoscopic and Histologic Findings

A 25-year-old male patient complained of mucoid, watery and nonbloody diarrhea for 4 weeks. Stool volumes and frequency (5 – 20 per day) varied. Furthermore, he suffered from cramping abdominal pain and weight loss of 10 kg. Physical examination was normal except for the patient’s fatigued appearance.

The white blood cell count was 14 500/µl. The hemogram showed 74.4% neutrophils, 10.5% lymphocytes, 10.6% monocytes, 3.0% eosinophils, and 0.4% basophils. Stool studies for infectious etiologies were unremarkable.

The initial esophagogastroduodenoscopy revealed signs of gastritis, and colonoscopy showed colitis with erosive-ulcerative lesions. Histopathological investigation demonstrated a reactive gastritis with no sign of *Helicobacter pylori*, while the mucosa of the colon presented inflammatory alterations reminiscent of a resolving infectious colitis. Focal subepithelial collagen fiber deposits were suggestive of a possible transition to collagenous colitis (Figure 1).

The patient was treated with antibiotics (metronidazole, mezlocillin), an anti-inflammatory agent (mesalazine, Salofalk) and an H2-receptor antagonist.

The frequency of bowel movements remained almost unchanged for 3 – 4 weeks. Subsequent endoscopy revealed signs of an erosive antral gastritis and duodenitis (Figure 2). The colonic ulcerations were no longer detectable. Instead only discrete inflammatory changes were found in the ascending colon. The biopsies obtained at this point clearly disclosed a pattern consistent with collagenous duodenitis (Figure 3) and collagenous colitis.

Further therapy consisted of mesalazin (Salofalk). The patient was symptom-free after 2 months of treatment. At 9 months after the diagnosis had been made, the clinical, laboratory, endoscopic, and histologic findings revealed complete remission.

Collagenous duodenitis is a rare disease with only seven cases reported in the literature. Each of those cases involved additional regions of the gastrointestinal tract [1 – 7]. The current (eighth) case report is the first to show that various affected regions of the intestine displayed simultaneous complete remission with the same treatment. The collagenous duodenitis and collagenous colitis healed after 9 months. Both diseases might reflect a similar or identical entity.

F.S. Schreiber1, S. Eidi2, M. Hidding3, J. Schmidt-Walczuch1, C. Werning1

1 Dept. of Medicine, St. Katharinen Teaching Hospital, University of Cologne Medical School, Frechen, Germany
2 Institute of Pathology, St. Elisabeth Teaching Hospital, University of Cologne Medical School, Cologne, Germany
3 Institute of Forensic Medicine, University of Cologne Medical School, Cologne, Germany

References

Corresponding Author
F. S. Schreiber, M.D.
Gastroenterology Division 600A C.R.B.
University of Pennsylvania 415 Curie Blvd.
Philadelphia, PA 19104 USA
Fax: + 1-215-573-2024
E-mail: franzs@mail.med.upenn.edu

Figure 1 Moderate infiltration of the colonic mucosa by lymphocytes, plasma cells, and polymorphonuclear leucocytes, with epithelial regeneration and focal deposits of collagen fibers in the center (van Gieson; × 200)

Figure 2 Duodenitis with minor mucosal changes

Figure 3 Band-like deposits of collagen fibers beneath the surface epithelium of the duodenal mucosa (van Gieson; × 400)