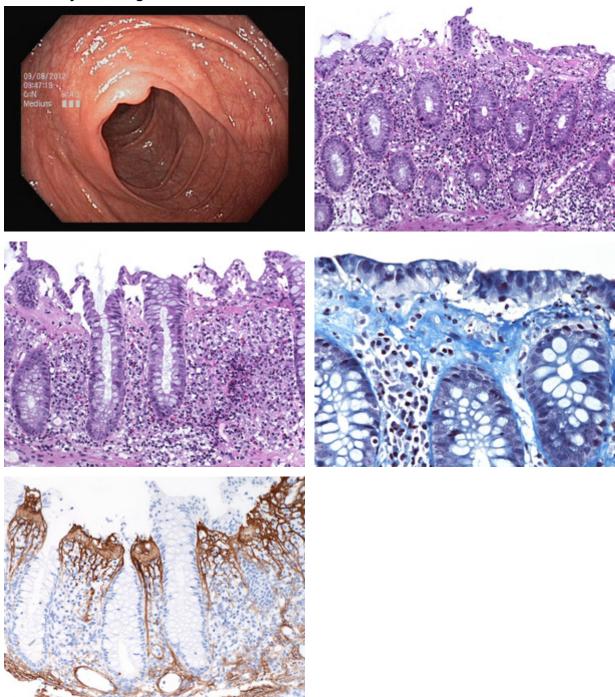
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A 39-year-old female presents with chronic watery diarrhea. Upon colonoscopy, the mucosa is nearly normal, showing only minimal unspecific changes.

What is your diagnosis?



Diagnosis

Collagenous colitis

Comment

Histology shows preserved mucosal architecture and evenly increased predominantly mononuclear inflammation within the lamina propria. Underneath the surface epithelium, a markedly thickened collagen layer is seen, most evident in between crypts. Note degeneration and detachment of surface epithelial cells.

Microscopic colitis is a common cause of chronic or recurrent watery (non-bloody) diarrhea. The term is used as an umbrella term that includes two major conditions without endoscopic or radiological lesions, but with histological abnormalities: lymphocytic colitis and collagenous colitis. Regarding the latter, most investigators will agree that the thickness of the collagen layer should exceed 10 μ m (often 15-30 μ m, up to 70 μ m) on well-orientated biopsies. Secondary changes to the surface epithelium, such as degeneration and detachment from the subepithelial collagen layer, are common and are usually more pronounced in collagenous than in lymphocytic colitis.

The excessive collagen deposition in collagenous colitis has been related to alterations in subepithelial myofibroblast function, possibly leading to matrix and/or collagen overproduction. However, impaired degradation of extracellular matrix proteins (i.e. impaired fibrolysis) may also play a major role. Care should be taken to avoid misinterpretation of a tangentially cut basement membrane. In selected cases additional stains, such as trichrome staining (panel D) or tenascin immunohistochemistry (panel E), may be helpful.

For further reading

- Chetty R, Govender D. Lymphocytic and collagenous colitis: an overview of so-called microscopic colitis.
 Nat Rev Gastroenterol Hepatol. 2012;9:209-18.
- Langner C. Colorectal normal histology and histopathologic findings in patients with chronic diarrhea.
 Gastroenterol Clin North Am. 2012;41:561-80.

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