LYMPHOCYTIC & COLLAGENOUS (MICROSCOPIC) COLITIS

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A CAUSE OF WATERY DIARRHOEA

Several forms of colitis are characterised by **chronic, watery diarrhoea**, a **normal or near-normal endoscopy** and **distinct histological changes**. The entities of lymphocytic colitis and collagenous colitis are now recognised as relatively common causes of diarrhoea and it is thought that they are related entities. The umbrella term microscopic colitis is sometimes used, but lacks diagnostic precision and can also include less well-defined entities. Although incidence and prevalence rates have been determined for some populations, it is of more use to know that lymphocytic and collagenous colitis cause approximately **10% of cases of chronic diarrhoea**, and up to 20% in patients over the age of 70.[1]

IS THE CAUSE KNOWN?

The aetiology is unknown, but there are some associations.

Some have pointed to a possible role for drugs such as **NSAIDs**[2-4], and cessation of these can be of therapeutic benefit. Other drugs have also been implicated less commonly.[5, 6] Some cases, possibly up to 40% but more likely around 5-10%, are associated with **coeliac disease** of the small intestine[7, 8] raising the possibility of an autoimmune process to a luminal antigen (gluten enemas in coeliac patients will provoke lymphocytosis). Other cases have been associated with a range of **autoimmune diseases** such as rheumatoid arthritis and Hashimoto's disease.[9, 10]

Finally, several well-characterised outbreaks of epidemic, apparently **infectious** diarrhoea with typical histology of lymphocytic colitis have been documented.[11] The proximal colon is often more severely affected. The first documented outbreak occurred in Brainerd County in Minnesota and is sometimes called "Brainerd diarrhoea". Interestingly, in the epidemic cases the diarrhoea was of acute onset and could be debilitating. No causative organism has yet been isolated, more than 20 years since the original description. It is interesting to speculate that occasional severe and acute sporadic cases of lymphocytic colitis could be related to this, but there is no proof for this at this time.

ARE LYMPHOCYTIC COLITIS AND COLLAGENOUS COLITIS RELATED ENTITIES?

Lymphocytic colitis and collagenous colitis have similar histological features, described below, and both can be associated with drugs and autoimmune diseases such as coeliac disease and rheumatoid arthritis. Moreover, cases of transition from one disease to the other are described. Collagenous colitis tends to be patchy whereas classical lymphocytic colitis generally affects the entire colon. Collagenous colitis may be more resistant to therapy, and more protracted.

PATHOLOGY

The mucosa in **lymphocytic colitis** usually has normal crypt architecture, but there are increased lymphocytes in the surface (Fig 1) and less prominently crypt epithelium. In addition, the surface epithelium often has degenerative changes and may shed. **Collagenous colitis** also has these changes, but by definition also shows increased collagen beneath the surface epithelium (Fig 2). These changes generally regress after successful treatment, but collagen deposition may persist after resolution of symptoms.

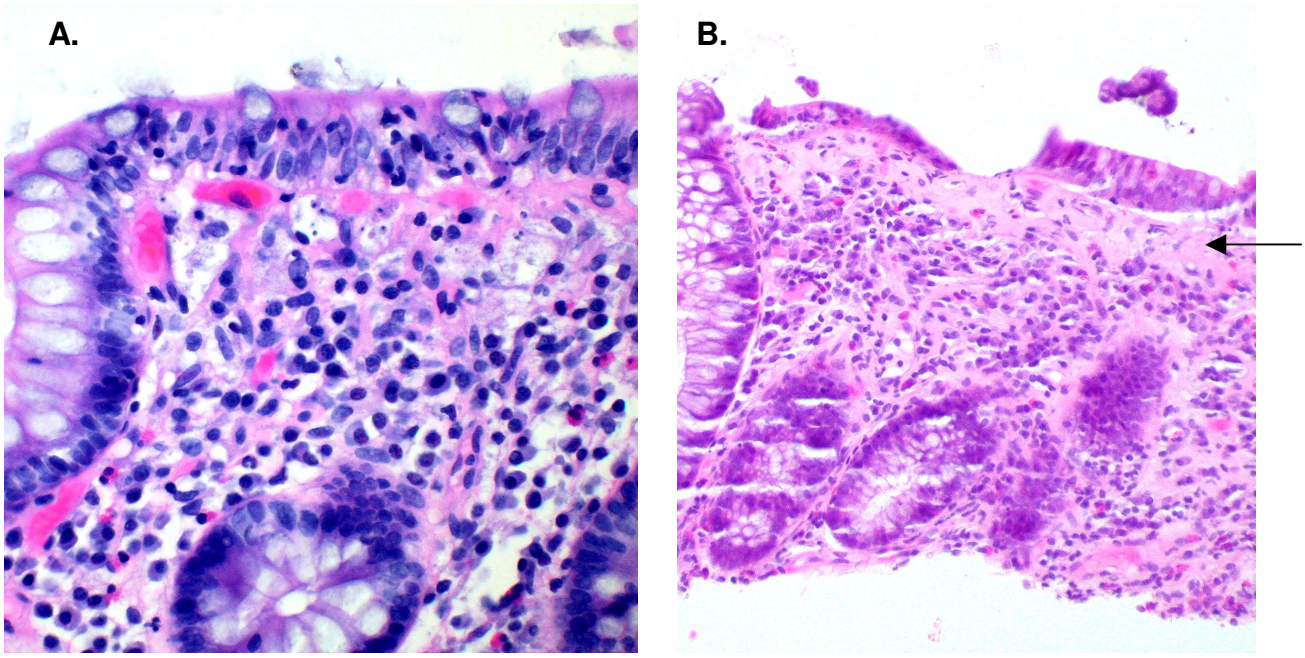

Figure 1. Lymphocytic and collagenous colitis. **A**. Lymphocytic colitis has increased intraepithelial lymphocytes in the surface epithelium. **B**. Collagenous colitis has a thickened band of subepithelial collagen, arrowed.

Variant pathology is increasingly being recognized. Variants include:

a. borderline intraepithelial lymphocytosis
b. cases with mild IBD-like changes including crypt distortion and Paneth cell metaplasia
c. a subgroup with giant cells
d. crypt-predominant lymphocytic colitis
e. cases with ileal involvement

Clinical variability also occurs. Some patients present with acute-onset diarrhoea. Others with typical histology may have macroscopic signs of colitis at endoscopy. Cases with borderline intraepithelial lymphocytosis may or may not have watery diarrhoea. When intraepithelial lymphocyte numbers are only mildly increased, coeliac disease, autoimmune diseases or NSAIDs should be considered as potential aetiological agents.

TREATMENT AND FOLLOWUP

Specific guidelines are beyond the scope of this discussion, and recent management algorithms have been published.[6] Although symptomatic treatment with antidiarrhoeals has been used, other treatment regimens have included agents such as bismuth subsalicylate, sulphasalazine, as well as budesonide and systemic steroids in resistant cases. The natural history in over 90% of cases of lymphocytic colitis is for disease resolution over a period of several years (mean 3 years) and histological normalisation in most but not all of these.

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