LETTER TO THE EDITOR

Elemental diet therapy for pouchitis following restorative proctocolectomy for ulcerative colitis

Dear Sir,

I read with interest the article by McLaughlin et al., 'Exclusive elemental diet impacts on the gastrointestinal microbiota and improves symptoms in patients with chronic pouchitis'.\(^1\) In their case series, 7 patients with pouchitis following restorative proctocolectomy for ulcerative colitis (UC) were treated with exclusive elemental diet therapy for 4 weeks. The median stool frequency significantly decreased from 12 to 6 per day. However, there was no significant difference in quality of life scores or pouch disease activity index before and after treatment. There were no significant changes in the concentration of bacteria after treatment. There was a trend towards an increase in the concentration of \textit{Clostridium coccoides}–\textit{Eubacterium rectale}. The authors concluded that elemental diet therapy appeared to improve the symptoms of pouchitis in some patients but is not an effective strategy for inducing remission.

We investigated the impact of elemental diet therapy on mucosal inflammation in patients with Crohn's disease (CD).\(^2\) Twenty-eight patients with active CD were treated with elemental diet therapy for 4 weeks. After the treatment, clinical remission was achieved in 71% of patients. Endoscopic healing and improvement rates were 44% and 76% in the terminal ileum and 39% and 78% in the large bowel, respectively. Before the treatment, the mucosal concentrations of interleukin (IL)-1\(\beta\), IL-6, IL-8 and tumour necrosis factor (TNF)-\(\alpha\) in the ileum and large bowel were significantly higher than in normal controls. These cytokine concentrations decreased to the levels of normal control after treatment. We confirmed that elemental diet therapy significantly reduces mucosal inflammation in patients with active CD. In another study, we also found that long-term elemental diet therapy has a clear suppressive effect on clinical and endoscopic disease activity and the mucosal cytokine levels in patients with quiescent CD.\(^3\)

We found that mucosal cytokine (IL-1\(\beta\), IL-6, IL-8 and TNF-\(\alpha\)) levels were elevated in patients developing pouchitis following restorative proctocolectomy for UC.\(^4\) On the hypothesis that elemental diet therapy may improve clinical and endoscopic disease activity in patients with pouchitis by suppressing mucosal cytokine production in the pouch, we treated several patients with chronic pouchitis with exclusive elemental diet therapy for 3–6 weeks (data not published). However, we failed to find any significant improvement in clinical symptoms or endoscopic findings. Furthermore, mucosal cytokine production was not significantly suppressed by elemental diet therapy. The pathology of ileal-pouch inflammation in UC may be different from that of mucosal inflammation in CD. Although further large controlled studies are required, we agree with the conclusion made by McLaughlin et al.\(^1\) for the moment. Elemental diet therapy cannot be recommended for the routine treatment of pouchitis following surgery for UC.

Conflict of interest statement

None declared.

References


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