CASE REPORT

Successful use of adalimumab in patient with treatment-refractory microscopic colitis

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SUMMARY

A 50-year-old woman with treatment-refractory lymphocytic colitis was diagnosed with ankylosing spondylitis. She was started on adalimumab injections which significantly improved her stool frequency and consistency and, consequently, her quality of life.

BACKGROUND

Microscopic colitis has been defined as a chronic inflammatory bowel disease featuring non-bloody, watery diarrhoea and a macroscopically normal (or near normal) colonic mucosa. It has two subtypes, lymphocytic and collagenous colitis, which display characteristic histological features.¹ It is thought to account for 4–13% of cases of chronic diarrhoea and its incidence is rising. Up to 22% of patients have >10 bowel motions per day and up to 27% have nocturnal diarrhoea.² This, along with other symptoms such as abdominal discomfort, weight loss and faecal incontinence, can significantly impair quality of life.

This report describes a case of microscopic colitis successfully treated with adalimumab. In the current literature there are limited case series and no large randomised control trials pertaining to this subject.

CASE PRESENTATION

A 50-year-old woman was referred to the colorectal surgeon with a 4-month history of diarrhoea. She was passing watery stools, not associated with mucous or blood, up to 12 times per day. She denied abdominal pain and fever and her weight was stable. Her general practitioner had prescribed loperamide and a course of antibiotics, but neither had alleviated her symptoms.

Apart from a history of anxiety and mild hypertension she was fit and well. She regularly took propranolol and citalopram and self-medicated with black cohosh for menopausal symptoms.

Her clinical examination was normal and she had unremarkable blood tests (including normal full blood count, urea and electrolytes, thyroid function and a negative tissue transglutaminase (TTG)). In view of a significant family history of bowel cancer, she was referred for colonoscopy. The colon was macroscopically hyperaemic with two small aphthous ulcers. Biopsies demonstrated histological features consistent with lymphocytic colitis.

Her diarrhoea was unrelenting, with some associated weight loss, so she underwent a CT scan of her abdomen and pelvis. This was unremarkable. A second colonoscopy was performed which was macroscopically normal and, once again, demonstrated features consistent with lymphocytic colitis.

She was referred to the gastroenterology team who started a 3-month reducing regimen of budesonide to treat her microscopic colitis. This improved her symptoms to an extent but she remained faecally incontinent at times with diarrhoea during the day and night. The patient started a low FODMAP (fermentable oligo, di, mono saccharides and polyols) diet, but this did not alleviate her symptoms. She was trialled successively on azathioprine and mercaptopurine but both caused intractable side effects with little associated benefit. They were stopped and she continued taking high-dose budesonide.

Her diarrhoea persisted and was now associated with urgency, abdominal bloating and distention. She described her life as a 'misery' and avoided leaving the house as a consequence of her unremitting diarrhoea and faecal incontinence.

A faecal calprotectin, faecal elastase and fasting gut hormone profile were all within normal range. Given the association of microscopic colitis with bile salt malabsorption she was referred for a selenomotaurocholic acid (SeHCAT) scan. This was mildly abnormal (13.4% 7-day retention) so she was started on a trial of cholestyramine. Unfortunately, this caused excess bloating so was substituted for colesevelam (in combination with budesonide) with little improvement in symptoms.

A plain abdominal X-ray at this stage revealed a normal bowel gas pattern but did show evidence of sacroiliitis. On further questioning, she admitted to joint pains and early morning stiffness so was referred to rheumatology and subsequently diagnosed with ankylosing spondylitis. She was started on adalimumab.

Postinitiation of adalimumab her rheumatological symptoms and diarrhoea improved significantly. The budesonide was weaned and then stopped. She now passes formed stools twice a day and no longer requires loperamide. This has improved her quality of life considerably.

DISCUSSION

Traditional medical therapy for microscopic colitis may include antidiarrhoeal agents such as loperamide, cholestyramine (if there is associated bile salt malabsorption) or budesonide. In addition, steroid-sparing agents such as azathioprine and methotrexate have been shown to be effective. Many patients, however, are refractory to these treatments.² Historically, colectomy was considered for patients who did not respond to pharmacological agents, but more recently some case series have demonstrated an improvement with biological agents such as infliximab and adalimumab.^{3–6}

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This case adds support to the use of anti-tumour necrosis factor (TNF) agents in microscopic colitis that is not responsive to standard therapy. Additional randomised, controlled studies are required to evaluate their efficacy further.

Competing interests None declared.

Patient consent Obtained.

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Learning points

- ▶ Microscopic colitis is an under-recognised and important cause of diarrhoea and its incidence is rising.
- ▶ Traditional therapies include antidiarrhoeal agents, such as cholestyramine, budesonide, methotrexate and azathioprine.
- ▶ Anti-TNF agents such as infliximab and adalimumab may be effective in patients who do not respond to standard pharmacological treatments.
- ▶ More research is required to further evaluate the efficacy and safety of anti-TNF drugs in microscopic colitis.

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