# Clinical Intelligence

Kevin Barrett, Sonia Saxena and Richard Pollok

# Using corticosteroids appropriately in inflammatory bowel disease:

a guide for primary care

#### INTRODUCTION

Inflammatory bowel disease (IBD) is a chronic relapsing-remitting inflammatory condition of the gastrointestinal tract, with extra-intestinal manifestations that can affect the skin, joints, eyes, and liver. The two main subtypes are Crohn's disease (CD) and ulcerative colitis (UC). IBD affects 1 in 250 people in the UK, with the typical GP practice having 30-40 registered patients with the condition.

Oral corticosteroids are highly effective in inducing remission in IBD and have been the mainstay of treatment of flare-ups since the 1950s. However, judicious prescribing is essential to avoid potential side effects. Doses of 20 mg or higher of prednisolone per day for more than 2 weeks increase the risk of infection.1

Patients with IBD flare-ups usually present with a combination of diarrhoea, abdominal pain, or rectal bleeding, although atypical presentations including weight loss, anaemia, and failure to thrive can occur, and the severity of symptoms may not reflect the severity of inflammation, particularly in children.

The Royal College of Physicians national IBD audits have shown that patients are often seen by a GP in the month before emergency admission, but medical therapy is not escalated. Half of the GPs surveyed as part of the Royal College of General Practitioners Inflammatory Bowel Disease Spotlight Project in 2017 say they lack confidence in managing IBD, and twothirds requested further education. An online toolkit (www.rcgp.org.uk/ibd) and an eLearning resource are now available (www.elearning.rcgp.org.uk/ibd).

Health, Imperial College London, London. R Pollok, PhD, FRCP, DTM&H, consultant physician and reader in gastroenterology, St George's University Hospitals NHS Foundation Trust, London.

K Barrett, MRCGP, GP partner; chair, Primary Care Society for Gastroenterology; and clinical

champion, RCGP and Crohn's and Colitis UK

Inflammatory Bowel Disease Spotlight Project.

London. **S Saxena**, MSc, MD, FRCGP, GP and

professor of primary care, School of Public

Address for correspondence

Kevin Barrett, New Road Surgery, 166 New Road, Croxley Green, Rickmansworth WD3 3HD, UK.

Email: kevin.barrett@nhs.net

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#### **MANAGEMENT OF FLARE-UPS**

Wherever possible, objective evidence of disease activity should be obtained by measuring serum inflammatory markers and faecal calprotectin. Treatment can reasonably be initiated in primary care in patients with mild to moderate UC or CD.

With a mild-to-moderate flare-up of UC affecting the rectum or recto-sigmoid, topical mesalazine therapy should be initiated using suppositories or enemas alone or together with oral mesalazine at a dose of 4-4.8 g per day. Once-daily oral mesalazine dosing is as effective as a twice or three times daily dosing regimen. Topical steroid preparations are less effective and should not be used first line. If UC is more extensive, the daily dose of oral mesalazine should be started or increased to 4-4.8 g until remission is achieved. The addition of topical therapy may also speed recovery but will be insufficient if used alone. When the flare is settled after 2-3 months, a longterm maintenance dose of mesalazine (1.2-2.4 g daily) can be re-initiated. Long-term high-dose mesalazine may be appropriate if normal maintenance doses do not maintain remission.<sup>2,3</sup> The type, location, and extent of IBD identified at colonoscopy should be communicated to the primary care team. It is important to appreciate that mesalazine has little proven efficacy in treating active Crohn's disease and no role in maintaining remission in Crohn's disease.3

In patients with UC who have not responded to mesalazine within 2-4 weeks, and those with mild-to-moderate CD, oral corticosteroids should be started. UK and European guidance recommends a starting dose of 40 mg oral prednisolone per day and reducing by 5 mg per day at weekly intervals, resulting in an 8-week course (a total of 252 tablets).<sup>2,3</sup> Shorter courses are associated with early relapse, and starting doses of prednisolone ≤15 mg/day are ineffective. It is generally accepted that vitamin D and calcium supplements should be co-prescribed with longer courses of oral corticosteroids

In mild-to-moderate ileo-caecal CD. budesonide (Budenofalk [Dr. Falk Pharma UK Ltd] or Entocort [Tillotts Pharma UK Limited]) 9 mg once daily for 8 weeks is recommended with a brief 2-week taper.3 These forms of budesonide are



Figure 1: Using corticosteroids appropriately in inflammatory bowel disease: infographic.

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formulated to release in the ileum and right colon. Budesonide is broken down in the liver by first-pass metabolism, greatly reducing many of the unwanted side effects of conventional corticosteroids. These therapies are also useful in treating microscopic colitis, which is distinct from UC and CD.

In severe disease (BO >6/day) delay in treatment may be associated with increased mortality. Admission should be considered in severe disease, or for those not responding to oral corticosteroids within a week, particularly with patients who are tachycardic, hypotensive, anaemic, or febrile, or where there are significant obstructive symptoms, or signs of acute kidney injury.

# THE ROLE OF PRIMARY CARE

National Institute for Health and Care Excellence Quality Standard 81 advocates a shared-care approach to managing IBD and close liaison with a local IBD multidisciplinary team.4 Where possible, management advice for treatment of flareups should be obtained from the IBD clinical nurse specialist via an IBD advice line. Patient-led action plans outlining treatment requirement in the event of a flare are useful when access to secondary care is limited.

### **USING CORTICOSTEROIDS APPROPRIATELY**

Corticosteroids have no proven efficacy in maintaining remission in IBD and should not be used for this purpose. The side effects can be clinically important, for example, hyperglycaemia in patients with coexisting diabetes. The risk of significant side effects increases with prolonged use and therefore alternative treatments should be considered if patients are refractory to corticosteroids (defined as requiring a repeat course within 3 months or continuous use for longer than 3 months).2 In this situation, secondary care centres will need to promptly initiate immunomodulators or biologics. Communication with the IBD team (usually via the IBD nurses) is important, as measurement of TMPT levels in primary care may be useful to allow rapid initiation of azathioprine when the patient is seen in secondary care. Steroid dependency should also underscore the need for a bone density assessment

There is room for improvement in prescribing corticosteroids both in primary and secondary care. Fifteen to 40% of UK IBD patients prescribed oral corticosteroids had excess steroid exposure.5,6 It is therefore recommended that corticosteroid use is audited to identify patients who are steroid dependent and where necessary expedite further management with the local IBD team. Some patients request a supply of corticosteroid 'rescue therapy', but this is not normally recommended and can lead to inappropriate repeat selfmedicating. Work is required to define appropriate corticosteroid use that could be used as a quality indicator to benchmark management in patients with IBD.7

#### **KEY MESSAGES**

- 1. Establish evidence of a flare-up of IBD, where possible, using serum inflammatory markers or faecal calprotectin.
- 2. Seek telephone advice from your local IBD team if there is any uncertainty regarding diagnosis or treatment. Reserve oral corticosteroids for those not responding to first-line treatment, or in severe disease.
- 3. Use an appropriate dose regime for 8 weeks, for example, 40 mg prednisolone per day, reducing by 5 mg per day at weekly intervals.
- 4. Assess response to treatment and avoid prolonged or repeated courses of corticosteroids — contact the IBD team to initiate steroid-sparing medications if this occurs
- 5. Do not use corticosteroids maintenance therapy in IBD.
- 6. Audit corticosteroid use in your practice to identify steroid dependency or excess use in IBD (Box 1).

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#### **Provenance**

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### **Competing interests**

Kevin Barrett is the Chair of the Primary Care Society for Gastroenterology, an organisation that receives funding from a number of pharmaceutical companies.

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