OPTIMIZING MANAGEMENT USING THE TREAT-TO-TARGET APPROACH

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A treat-to-target approach is an established concept in rheumatoid arthritis and an evolving concept in inflammatory bowel disease (IBD). A number of other chronic inflammatory diseases such as asthma have also incorporated easily measured targets into their therapeutic algorithm. In these diseases it has been shown that simply reaching a symptom-based endpoint may leave a considerable reservoir of subtle inflammation untreated that may drive tissue damage and remodelling. An international group, under the auspices of the International Organization for the Study of Inflammatory Bowel Diseases, is working on finalizing the targets and monitoring these concepts in IBD. The objective is to change the overall course of the disease in IBD, thereby reducing tissue damage, preventing complications and morbidity. A number of targets are available including steroid-free clinical remission, inflammatory markers such as C-reactive protein, fecal calprotectin, fecal lactoferrin, endoscopic and histologic remission, cross-sectional imaging remission such as ultrasonography, CT and MR enterography and possibly cytokine panels, metagenomics and mRNA arrays as well. The time to achieve the targets is likely to be as important as reaching the target itself. Properly designed studies are required to establish that such an approach is better than more conventional approaches and some of the trials are currently underway. Treating to target requires establishing appropriate prognosis so that treatment protocols may be tailored to patient subgroups thus avoiding either over-treatment or under-treatment. In IBD, endoscopic mucosal healing has been most studied as a target, however, prospective data is required.

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MANAGEMENT OF *CLOSTRIDIUM DIFFICILE* INFECTION IN PATIENTS WITH IBD

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Epidemiologic evidence exists that both colonization and infection with *Clostridium difficile* occur more frequently in patients with inflammatory bowel disease (IBD), especially those with ulcerative colitis (UC), than in the general population. Traditional risk factors for *C. difficile* infection (CDI) do not appear to be offset by the young age of patients with IBD. Risk appears to be augmented by corticosteroid use and the presence of underlying colitis, with its attendant mucosal ulceration and increased colonic permeability.

Symptoms of CDI in patients with IBD may be indistinguishable from those of an IBD flare, and the typical pseudomembrane of CDI is usually absent in IBD patients, making flexible sigmoidoscopy of limited diagnostic use. No guidelines are available for the use of enzyme-linked immunosorbent assay, glutamate dehydrogenase, or nucleic acid amplification tests, such as polymerase chain reaction, to diagnose CDI in patients with IBD. Therefore it is a matter of clinical judgment whether to treat a patient, who has what appears to be an IBD exacerbation, for CDI.

It is a common belief that CDI worsens both the short- and long-term outcomes of IBD, with more frequent emergency department and hospital visits, increased length of stay, greater need for colectomy and increased mortality rates, although supporting data for these conclusions are quite controversial.

Management of CDI in IBD involves several focused clinical decisions, including whether to initiate or discontinue immunosuppressive medication, whether to use conventional or anti-*C. difficile* antimicrobials, and, if so, which ones. Absent data, caution is recommended in beginning or escalating immunosuppression without appropriate antibiotic coverage. There are no universal guidelines for treatment of CDI in patients with IBD, although it seems reasonable to use the same guidelines, based on CDI severity, as recommended for patients without IBD, with a low threshold for treatment escalation. In the absence of data to the contrary, I personally prefer vancomycin and fidaxomicin for patients with IBD. Fecal microbiota transplant for recurrent IBD cannot be recommended outside of a well-designed research protocol.

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