LETTER FROM THE EDITOR

Drugs that target tumor necrosis factor (TNF) play a major role in the treatment of inflammatory bowel disease (IBD), but many questions about these drugs remain unanswered. Fortunately, several recent studies have begun to shed light on some of these questions, which will hopefully improve the efficacy of anti-TNF therapy. Two of these articles are discussed in this month's issue of *Gastroenterology & Hepatology*.

One question related to anti-TNF therapy is why some patients do not respond to these drugs, or why patients respond to induction therapy but then lose response during maintenance therapy. To address the latter question, Steenholdt and colleagues measured levels of infliximab (Remicade, Janssen Biotech) and/or anti-infliximab antibodies in patients who responded to induction therapy and then either maintained or lost response during maintenance therapy. This study was published in the *Scandinavian Journal of Gastroenterology* (2011;46:310-318), but a summary of this article and an accompanying commentary are provided in the current issue of *Gastroenterology & Hepatology* (page 131).

As described in this summary, Steenholdt and colleagues used receiver operating characteristics analysis to determine cutoff levels that could distinguish between patients who maintained response to infliximab and those who lost response. Among Crohn's disease patients, the researchers achieved a sensitivity of 81% and a specificity of 94% when they used a combination of the 2 cutoff values identified in this population—0.5 µg/mL for infliximab trough level and 10 U/mL for anti-infliximab antibody level.

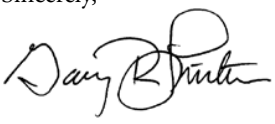
While being able to predict whether patients will respond to a particular therapy is helpful, this research is just the first step toward improving our ability to optimize use of anti-TNF therapy. Ultimately, clinicians need to know how to best manage patients who lose response during maintenance therapy. As Marie-France Dubeau and Subrata Ghosh discuss in their commentary, future studies should assess the efficacy of different interventions for different subgroups of patients, depending on what measurement of infliximab and anti-infliximab antibody levels suggests about the reason for loss of response. It remains to be seen whether such a strategy will improve patients' response to therapy, but having a better understanding of why patients lose response to anti-TNF drugs should help clinicians to better address this problem.

Other major questions gastroenterologists must answer when treating IBD patients relate to the goal of therapy. Specifically, is it enough to control patients' symptoms, or should we aim to "cure" the disease? If the latter, how do we define this goal and measure our progress toward it? One answer that has been proposed is that clinicians should aim to achieve mucosal healing, as it appears to be a good indicator that the patient's inflammation has been adequately quelled. In this month's Advances in IBD column on page 117, William J. Sandborn discusses the results of a recent paper in which he and his coauthors analyzed data from the Active Ulcerative Colitis Trials (ACT 1 and ACT 2) to determine whether mucosal healing predicted long-term clinical outcomes. This study, which was recently published in *Gastroenterology* (2011;141:1194-1201), found that patients who achieved mucosal healing by Week 8 following the start of infliximab therapy had lower rates of hospitalization or surgery and higher rates of steroid-free remission over the next 6–12 months. While treating to mucosal healing is not yet the standard of care, Sandborn suggested that clinicians might consider trying to achieve this goal in patients who are at higher risk for poor outcomes.

Also in this month's issue of *Gastroenterology & Hepatology*, we have an excellent review of advances in therapy for hepatitis C virus infection, as well as a feature on the diagnosis and treatment of intestinal Behçet disease. This month's columns address the benefit of vaccinating patients with chronic liver disease, the risks and potential cost savings of not sending diminutive polyps for histologic examination, and new technologies for examination of the esophagus, as well as the aforementioned discussion of mucosal healing in ulcerative colitis. Finally, we have an interesting case report of a patient with Crohn's disease who subsequently developed mucormycosis.

As with the thought-provoking studies mentioned above, I hope these articles answer some of your questions while also spurring your curiosity to learn more.

Sincerely,



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