

## High Concentration of Infliximab in Feces Linked to Reduced Response to Ulcerative Colitis Therapy

The loss of infliximab (Remicade, Janssen) into the stool of patients with severe ulcerative colitis (UC) is associated with a lack of primary response to therapy, according to a study from the University of Amsterdam hospital in Amsterdam, The Netherlands.

For the study, which was published in the August issue of *Gastroenterology*, Brandse and colleagues analyzed 195 stool samples from 30 patients with moderate to severely active UC. Samples were collected during the first 2 weeks of the patients' infliximab therapy. Using an enzyme-linked immunosorbent assay (Sanquin Biologicals Laboratory), the researchers measured the concentration of infliximab in serum and supernatants of fecal samples. Clinical and endoscopic follow-up occurred 2 weeks, 8 weeks, and 3 months after initial treatment.

Infliximab was identified in 66% of the samples, with the highest concentrations appearing in the first days after the initial infusion. Patients without a clinical response to treatment at week 2 had higher median stool concentrations of infliximab after the first day of treatment than patients who did respond clinically (5.01 µg/mL vs 0.54 µg/mL, respectively;  $P=.0047$ ). No correlation was found between serum and fecal concentrations of infliximab.

The authors hypothesized that patients with severe disease lose the greatest amounts of infliximab when the mucosa of the gut is most inflamed and, therefore, "leaky." The authors proposed that clinical trials examine the use of intensive dosing regimens in patients with severe disease.

## Doxorubicin Combined With Optimized Radiofrequency Ablation Improves Overall Survival in Hepatocellular Carcinoma

A heat-activated liposomal encapsulation of doxorubicin (ThermoDox, Celsion Corporation) combined with optimized radiofrequency ablation (RFA) for hepatocellular carcinoma (HCC) improved overall survival (OS) by 2.1 years compared with optimized RFA alone, according to a post hoc analysis of the HEAT study. Results were recently reported by the agent's manufacturer.

The HEAT study enrolled 701 patients with HCC, of whom 452 patients (64%) had a single HCC lesion

falling into the category of either 3 to 5 cm or 5 to 7 cm. Of these patients, those who received an optimized RFA procedure (285 patients, or 41% of the study) showed an average 58% improvement in OS. Doxorubicin improved OS in this subgroup from 53.6 months with optimized RFA alone to 79 months with doxorubicin plus optimized RFA.

## Temporary Fecal Diversion Successful in the Majority of Cases of Perianal Crohn's Disease

Approximately two-thirds of patients who undergo temporary fecal diversion for refractory perianal Crohn's disease (CD) experience an improvement in symptoms, according to a recent meta-analysis. However, bowel restoration is successful in just one-sixth of patients who undergo fecal diversion.

Singh and colleagues, who reported their results in the August issue of *Alimentary Pharmacology & Therapeutics*, conducted a systematic review and analysis of 556 patients from 16 cohort studies to evaluate the benefit of temporary fecal diversion for perianal CD. The researchers focused on the effectiveness, long-term outcomes, and factors associated with the procedure. The study explored the rates of early clinical response, attempted and successful restoration of bowel continuity after temporary fecal diversion (with no symptomatic relapse), rediversion in patients with attempted bowel restoration, proctectomy with or without colectomy and end-ileostomy, and the factors associated with successful bowel continuity restoration.

Results of the meta-analysis revealed that 63.8% (95% CI, 54.1%-72.5%) of patients with refractory perianal CD experienced early clinical response after fecal diversion. Of the 34.5% of patients (95% CI, 27.0%-42.8%) in whom bowel continuity restoration was attempted, 26.5% (95% CI, 14.1%-44.2%) required rediversion owing to relapse. Only 16.6% (95% CI, 11.8%-22.9%) of patients underwent a successful restoration. A total of 41.6% (95% CI, 32.6%-51.2%) of patients underwent proctectomy after temporary fecal diversion failed.

The only factor that was linked to bowel continuity restoration was lack of rectal involvement. Although the use of biological agents might be expected to increase the success rate of bowel continuity restoration after temporary fecal diversion, there was no difference in success rates between the prebiological and biological eras (13.7% vs 17.6%;  $P=.60$ ).