GI Bleeds Healed by Preemptive Omeprazole

BY KATHLEEN LOUDEN
Contributing Writer

CHICAGO — Patients with bleeding peptic ulcers have quicker resolution of bleeding stigmata and less need for endoscopic therapy if they receive high-dose intravenous omeprazole before endoscopy, James Lau, M.D., reported at the annual Digestive Disease Week.

Dr. Lau, director of the endoscopy center at Prince of Wales Hospital in Hong Kong, presented the results of a double-blind, placebo-controlled trial of omeprazole in 369 patients with overt signs of upper GI bleeding who were scheduled for endoscopy.

There were significantly more clean-base ulcers at index endoscopy in patients on omeprazole versus placebo.

Between February and November 2004, Dr. Lau and his coinvestigators randomized 179 of the patients to receive an 80-mg IV bolus of omeprazole and 8 mg/h before endoscopy (mean hours of infusion 14.9). The other 190 patients received a placebo before the procedure.

At endoscopy, a bleeding peptic ulcer was the most common cause of upper GI bleeding found. Bleeding ulcers were documented in 110 patients who had received high-dose omeprazole (61%) and 112 patients who had received placebo (59%) before endoscopy.

The primary outcome measured was the need for endoscopic treatment, which consisted of epinephrine injection and heater probe thermocoagulation for actively bleeding ulcers or ulcers with nonbleeding visible vessels or clots. Significantly fewer patients with bleeding ulcers in the omeprazole group needed endoscopic treatment, compared with the placebo group (19 of 110 patients vs. 40 of 112), he said.

In this subgroup, only 20 (18%) of the 110 patients who received omeprazole had endoscopic stigmata of bleeding, whereas 41 (37%) of the 112 patients who received placebo had bleeding stigmata. The difference was statistically significant.

Preemptive use of high-dose omeprazole appears to have not only hemostatic effects but also healing effects, Dr. Lau said. Data showed significantly more clean-base ulcers at index endoscopy in patients assigned to the proton pump inhibitor than in those on placebo (74 vs. 50, respectively). ■

New Imaging Tool May Help Diagnose Neoplasms in UC

BY KATHLEEN LOUDEN
Contributing Writer

CHICAGO — Confocal scanning laser endomicroscopy combined with chromoendoscopy identifies more precancerous lesions in patients with ulcerative colitis than does standard colonoscopy, investigators reported at the annual Digestive Disease Week.

This new method can accurately detect both intraepithelial neoplasms and colitis-associated colorectal carcinomas, according to the study's principal investigator, Ralf Kiesslich, M.D., of Johannes Gutenberg University, Mainz, Germany. Called confocal endomicroscopy, the method involves insertion of a confocal microscope into a traditional endoscope.

The study enrolled 153 patients with long-term ulcerative colitis in remission. Of those, 80 were randomized to undergo panchromoendoscopy with injection of 0.1% methylene blue dye for enhanced viewing of the colonic mucosal surface. All circumscribed lesions in the colonic mucosa that chromoendoscopy detected were then evaluated with confocal endomicroscopy for cellular and vascular changes. Targeted biopsies were performed of all circumscribed lesions.

The other 73 patients underwent standard colonoscopy. In this group, targeted biopsy specimens of visible mucosal changes were obtained in addition to biopsy specimens every 10 cm between the anus and cecum.

Confocal endomicroscopy helped detect 19 intraepithelial neoplasms, but colonoscopy found only 4, a statistically significant difference. The new technique identified lesions with an accuracy of nearly 98%. This high accuracy is the result of a combination of chromoendoscopy, which unmasks circumscribed lesions, and endomicroscopy, which allows in vivo diagnosis, Dr. Kiesslich said in an interview.

Confocal endomicroscopy also reduced the number of biopsies to 21, compared with 42 in the conventional endoscopy group.

With this new system, biopsies can be limited to relevant lesions—those with visible mucosal changes—thus allowing for "smart" biopsies, Dr. Kiesslich said in a statement. Confocal endomicroscopy may, therefore, improve the management of ulcerative colitis and lead to early detection of precancerous and cancerous lesions of the colon.

Paul Silva, director of regulatory affairs for Pentax Precision Instrument Corp., the device maker, said, "In North America, Pentax is sponsoring a clinical multisite trial of the device to collect data for [FDA] clearance as a biopsy-targeting system."

Pentax's European division provided research support for this study. ■

Infliximab Seems Effective in Treating Active Ulcerative Colitis

BY KATHLEEN LOUDEN
Contributing Writer

CHICAGO — Active ulcerative colitis responds to the drug infliximab, according to results of two multicenter phase III trials reported at the annual Digestive Disease Week.

Active Colitis Trial (ACT) 1 and ACT 2 each enrolled 364 patients with moderate or severe ulcerative colitis, refractory to at least one standard therapy.

Investigators randomized patients to receive infliximab at a 5 mg/kg dosage, a 10 mg/kg dosage, or placebo at baseline and at weeks 2 and 6, and then every 8 weeks through week 46.

After 8 weeks of infliximab therapy at either dosage, more than 60% of patients in each trial demonstrated improvement in their symptoms vs. approximately 29% and 37% of placebo-treated patients in ACT 1 and 2, respectively, the authors reported. At 30 weeks, the clinical response was still significantly better in the infliximab groups.

Infliximab also effectively induced remission and led to mucosal healing in patients with active ulcerative colitis, both studies showed.

"This is very encouraging news for a patient population that has few treatment options," said William Sandborn, M.D., principal investigator of ACT 2 and head of the Mayo Clinic College of Medicine's irritable bowel disease interest group and clinical research unit.

Both ACT 1 and 2 trials had similar results and patient populations, according to Dr. Sandborn, whose institution was one of 55 study centers. He described subjects as outpatients with relatively stable disease.

At enrollment, ACT 1 patients had not responded to treatment with corticosteroids and/or immunosuppressive therapy, whereas patients in ACT 2 had experienced treatment failure with 5-aminosalicylates, steroids, and/or immunosuppressives. The duration of ACT 1 also was longer (54 vs. 30 weeks).

Clinical response was defined as a decrease in the Mayo score of at least 30% and 3 or more points, plus either a reduction of 1 or more points in the rectal bleeding score or a score of 0 or 1 at week 8.

In addition to clinical response, both trials studied clinical remission—a Mayo score of 2 or less, with no individual subscores greater than 1—and mucosal healing, characterized as an endoscopy subscore of 0 or 1.

Remission rates for the drug-treated patients were as high as 39% in ACT 1 (5 mg/kg) at week 8, compared with 15% for placebo. In ACT 1, the difference in the patients' 8-week remission rates between the 10 mg/kg infliximab dosage (32%) and placebo was highly statistically significant, said that trial's lead investigator, Paul Rutgeerts, M.D., from the University Hospital, Leuven, Belgium. Dr. Rutgeerts is a grant recipient of Centocor, the manufacturer of infliximab (Remicade).

Significant differences in remission rates between infliximab and placebo also were evident in ACT 2 and continued at 30 weeks in both trials.

Mucosal healing occurred at week 30 in a higher percentage of patients receiving 10 mg/kg of infliximab than in those with the smaller dosage (50% vs. 49% in ACT 1; 57% vs. 46% in ACT 2). Healing rates for both dosages were significantly higher than for placebo (25% in ACT 1; 30% in ACT 2).

In each study, the proportion of patients who were in remission and able to stop use of corticosteroids after 30 weeks of infliximab therapy was significantly greater for both dosages, compared with placebo.

Dr. Sandborn is also a grant recipient of Centocor. ■

BMI Linked to Surgical Infections

MIAMI — The incidence of surgical site infections after colorectal surgery could be reduced through greater awareness of risk factors, Harry van Goor, M.D., said at the joint annual meeting of the Surgical Infection Society and the Surgical Infection Society–Europe.

In a prospective, randomized, multicenter study of adults who elected colorectal resection for benign disease, 163 of the 1,701 patients (9.6%) had at least one surgical site infection (SSI), reported Dr. van Goor, a surgeon at the University Medical Center Nijmegen (the Netherlands). Of these SSIs, 66 (3.8%) were incisional infections, and 111 (6.5%) were organ/space infections. Approximately 50% of the infections in a group of 1,701 colorectal surgery patients occurred within 9 days after surgery, and 97% occurred within 24 days after surgery.

Significant independent risk factors for incisional infections included high body mass index (odds ratio of 2.6), bowel preparation with antibiotics (OR 0.5), preoperative hospitalization (OR 1.8), and wound classification (OR 2.8).

Significant independent risk factors for organ/space infections included age (OR 0.4), preexisting abscess or fistula (OR 19.1), diabetes (OR 2.4), perioperative steroid use (OR 2.1), preoperative hospitalization (OR 1.4), multiple procedures (OR 2.5), and wrapping of the antiadhesion barrier around an anastomosis (OR 3.1).

"Hospital stay increases by an average of 7 days if a surgical site infection occurs," said Dr. van Goor. Furthermore, patients with SSIs are more likely to be admitted to the ICU than patients without infections.

—Heidi Splete