Contrast Medium Eased Small Bowel Blockages

BY KATE JOHNSON
Montreal Bureau

MONTREAL — For patients with adhesive small bowel obstruction, a water-soluble contrast medium produces significantly better outcomes than conservative treatment, according to a study presented at a meeting sponsored by the International Society of Surgery.

“Gastrografin [meglumine diatrizoate] has been shown to shift fluid, dilute intestinal contents, and decrease edema in the intestinal wall, facilitating motility,” said Dr. Salomo Di Saverio of the emergency surgery unit at St. Orsola-Malpighi University Hospital in Bologna, Italy.

The reported operative rate for adhesive small bowel obstruction (ASBO) ranges from 27% to 42%, said Dr. Di Saverio. Although emergency surgery is mandatory in the case of total occlusion or when strangulation is suspected, partial occlusion is an indication for conservative treatment consisting of an NPO (nil per os) diet, nasogastric tube suction, and intravenous fluid resuscitation with the correction of electrolyte imbalance, he said in an interview.

In a multicenter, prospective study, Dr. Di Saverio compared conservative treatment to Gastrografin (GG) treatment in 76 patients with ASBO. Half of the patients were randomized to each arm of the study. The mean age of the patients was 68 years in the conservative treatment group, and 64 years in the GG group.

All patients were evaluated radiologically within 36 hours of treatment initiation. Patients in the GG group who had no evidence of GG in their bowel at 36 hours were considered to have a full obstruction and underwent emergency laparotomy, whereas patients with GG in the bowel but persistent symptoms at 36 hours were considered to have partial obstruction and were switched to conservative treatment. Patients in the conservative treatment group who had persistent obstruction at 36 hours were continued on conservative therapy for an additional 36 hours and then reevaluated.

A total of 31 patients in the GG group (82%) had resolution of their obstruction in a mean time of 6.5 hours, whereas the remaining 7 patients (18%) ultimately underwent surgery. One patient needed bowel resection for strangulation, said Dr. Di Saverio. In contrast, only 21 patients (55%) in the conservative treatment group responded to initial conservative therapy, and the remaining 17 (45%) needed surgery, including 2 patients who had bowel resections for strangulation.

The significant difference in surgery rate (18% in the GG group vs. 45% in the conservative treatment group) was mirrored in the difference in time to symptom resolution (6.5 hours vs. 43 hours, respectively), and the length of hospital stay (4.6 days vs. 7.8 days).

Complications such as bowel strangulation and resection were higher in the conservative treatment group (5% vs. 2.5%), but this difference was not significant, said Dr. Di Saverio. During a mean follow-up period of 20 months, there was no significant difference in relapse rate.

Dr. Di Saverio declared no conflict of interest with regard to Gastrografin.

Diagnostic Criteria Devised for Adult Autoimmune Enteropathy

BY TIMOTHY F. KIRN
Sacramento Bureau

The Mayo Clinic has proposed new criteria for diagnosing adult autoimmune enteropathy, a rare and often disabling condition that can cause malabsorption, weight loss, and malnutrition.

The researchers found that only about 15% of the patients with autoimmune enteropathy had a diagnosis that fit the typical pattern previously reported, but 80% had a predisposition to autoimmune disease, as indicated by their history or levels of circulating antibodies.

Based on the cohort, the investigators also proposed criteria that could be used for definitive diagnosis:

- Adult-onset chronic diarrhea lasting longer than 6 weeks in duration.
- Malabsorption.
- Specific small bowel histology of partial or complete villous blunting, deep crypt lymphocytosis, increased crypt apoptotic bodies, and minimal intraepithelial lymphocytes.
- Exclusion of other causes of villous atrophy, including celiac disease, refractory sprue, and intestinal lymphoma.
- Antieteroocyte and/or antigoblet cell antibodies.

For treatment, the Mayo Clinic has proposed a spectrum of therapies, from a low-intervention, dietary approach to immunosuppressive therapy.

One patient received metronidazole for 4 weeks as well as diphenoxyate, but did not respond. Nine of the patients responded to their treatment with complete resolution of their diarrhea, and three patients had a partial response.

High-dose steroids (greater than 40 mg/day) produced a rapid clinical response in two patients, but both needed additional therapy to maintain remission within 3-11 months.

One patient responded to prednisone 10 mg/day, and remained in remission on 5 mg/day for 14 months. Five of the responders went into remission with prednisone at doses of 20-60 mg/day in 4-8 weeks, then were maintained with budesonide. Infliximab was used in two patients and produced a rapid response, the investigators said.

Mild, Acute Pancreatitis Resolves Well With a Normal Diet

BY MITCHEL L. ZOLER
Philadelphia Bureau

PHILADELPHIA — An early return to a normal diet was not harmful and might even have expedited the hospital discharge of patients with mild, acute pancreatitis in a randomized, prospective study with 62 patients.

“By adjusting feeding, the NPO [nil per os] ‘safe and may lead to reduced emotional and financial costs,’” Dr. Nison L. Badalov said at the annual meeting of the American College of Gastroenterology.

The dogma has been that stimulating the pancreas [by a usual, oral diet] leads to enzyme secretion and complications of pancreatitis, which has led to a standard approach of ‘resting the pancreas’ by relying on parenteral nutrition and intravenous hydration, said Dr. Badalov a gastroenterologist at Maimonides Medical Center in New York.

Dr. Badalov and his associates randomized consecutive patients with mild, acute pancreatitis seen at Maimonides during September 2006–September 2007 to three different feeding strategies. The patients’ average age was 55 years. Patients were diagnosed with acute pancreatitis by meeting at least two of these three criteria: pain consistent with pancreatitis, an imaging study (such as CT) that confirmed the diagnosis, and a serum amylase level of more than three times the upper limit of normal.

Mild pancreatitis was defined as having a Ranson score of less than 3, and an acute physiology and chronic health evaluation (APACHE) II score of less than 8, with no evidence of organ dysfunction or pancreatic necrosis at admission.

Patients were placed on either a nothing-by-mouth (NPO) regimen, a semi-elemental formula as tolerated within 12 hours of admission, or a regular diet as tolerated within 12 hours of admission.

There was a significant difference in the median duration of hospitalization between the NPO and regular diet groups: The median length of stay was 3.1 days among patients who were quickly placed on a regular diet, compared with 5.8 days among 22 patients who were NPO, Dr. Badalov said in an interview.

In all three feeding strategies, patients who were in the group given a regular diet had the best outcomes. Patients who were in the other two groups had a 30% rate of complications, compared with 10% in the regular diet group.

Dr. Badalov said the findings are important because the majority of patients with mild acute pancreatitis are treated with NPO diets, which are stressful and may lead to higher costs.