Don't Delay Cholecystectomy in Biliary Pancreatitis

BY ROBERT FINN
San Francisco Bureau

HUNTINGTON BEACH, CALIF. — It's better to perform a cholecystectomy in a patient with biliary pancreatitis during the patient's first hospital admission than to wait several weeks, according to a study presented by Dr. Kaori Ito at the Academic Surgical Congress.

Current guidelines suggest that it may be acceptable to discharge the patient after resolution of the pancreatitis and then wait 2-4 weeks to perform the operation (Gut 2005;54:1-9; Gastroenterology 2007;132:2019-21). But in a retrospective study, Dr. Ito of Harvard Medical School, Boston, and her colleagues found that delays in cholecystectomy were associated with a high incidence of gallstone-related events, a longer overall length of stay, and worse postoperative outcomes.

Furthermore, performing endoscopic sphincterotomy does not eliminate the risk of recurrent pancreatitis or other gallstone-related events, Dr. Ito said.

The study included 281 patients with biliary pancreatitis; those with necrotizing pancreatitis were excluded. Of the study patients, 162 (group A) underwent cholecystectomy during their initial admission and the other 119 (group B) underwent cholecystectomy on a subsequent admission. The two groups were similar in terms of demographics, comorbidities, and the severity of their pancreatitis. However, a significantly larger proportion of the patients in group A were female (72% vs. 61%).

In group B, during the interval between discharge and cholecystectomy, 39 of the patients (33%) experienced a gallstone-related event. In addition, 16 of those 39 patients had recurrent pancreatitis. Overall, 50% of the patients experiencing recurrent pancreatitis did so within 4 weeks of their initial discharge.

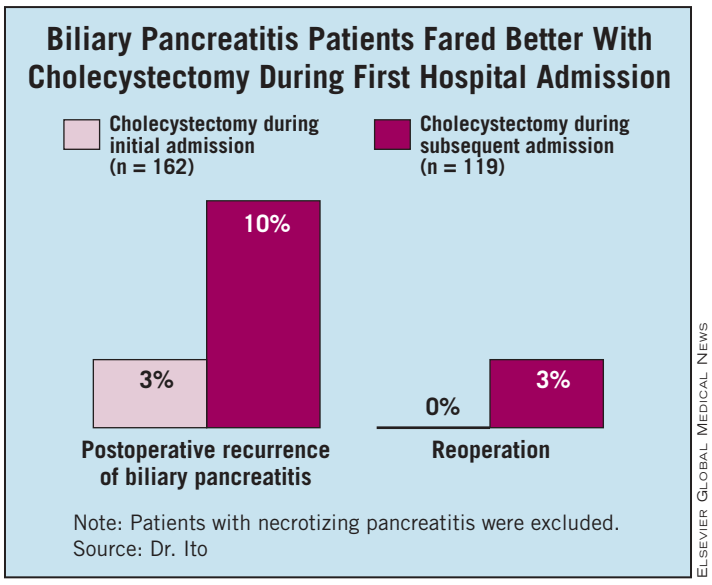
Group A and group B differed significantly on total length of hospital stay: 5 days on average for group A and 7 days for group B (including both hospital admissions). Patients in group A also fared better than those in group B in terms of postoperative recurrence of biliary pancreatitis (3% vs. 10%) and reoperation (0% vs. 3%). There were no statistically significant differences between the groups in readmission after the operation or in perioperative morbidity, and no patients in either group died during the perioperative period.

Endoscopic sphincterotomies were performed in 42 (35%) of the group B patients during the initial hospital admission. The total proportion of gallstone-related events did not differ between the patients who underwent a sphincterotomy and those who did not.

A greater proportion of patients who underwent sphincterotomies experienced acute cholecystitis (12% vs. 1%), but 18% of patients who did not receive a sphincterotomy had recurrent pancreatitis, vs. 5% of those who did. These two differences were statistically significant.

During the question and answer period after the presentation, one physician asked whether there could have been selection bias in this retrospective study. He suggested that there may have been some unknown but systematic difference between the patients who received a cholecystectomy during their initial admission and those who waited. Dr. Ito acknowledged that she could not exclude this possibility.

Dr. Ito stated that she had no relevant financial relationships associated with her presentation.



Preventing Pancreatitis After ERCP: Risk Stratification Is Important

BY KATE JOHNSON
Montreal Bureau

MONTREAL — Prophylactic administration of allopurinol before endoscopic retrograde cholangiopancreatography does not reduce the risk of postprocedure pancreatitis, compared with placebo, in average-risk patients, but the therapy may be beneficial in a high-risk subgroup, reported Dr. Joseph Romagnuolo of the Medical University of South Carolina, Charleston.

"I think it's probably not worth doing this in average-risk patients and may even be harmful. But we still don't have a whole lot of information about high-risk groups and so I think there's still an unanswered question as to whether it's beneficial in this group," he said in an interview at the Canadian Digestive Diseases Week.

His randomized, multicenter, placebo-controlled trial found that there was not a significant difference in the rate of postprocedural pancreatitis between 293 patients who received allopurinol 300 mg and 293 patients who received placebo approximately 1 hour before ERCP.

Pancreatitis was defined as pancreatic-type pain requiring medical attention within 24 hours of the ERCP and lasting for more than 24 hours, he said.

The overall rate of pancreatitis was 5.5% in the allopurinol-treated group (mean age 54 years), compared with 4.1% in those receiving placebo (mean age 55.5 years), he noted. About 10% of the study subjects were classified as high-risk patients, and within this subgroup, allopurinol was associated with lower rates of pancreatitis, compared with placebo (6.3% vs. 23.5%).

In contrast, among average-risk patients only, the therapy was associated with higher rates of pancreatitis, compared with placebo (5.4% vs. 1.5%), suggesting "nonsignificant trends toward possible benefit in the high-risk group, and possible harm for the remaining subjects," according to Dr. Romagnuolo. "In our trial, high risk was defined as suspected sphincter of Oddi dysfunction or if pancreatic therapy was anticipated as a reason for the procedure," he explained. "So if there were plans to take out a pancreatic stone or stent a stricture, those were all considered high-risk patients."

Three previous trials have shown discrepant results with allopurinol and post-ERCP pancreatitis, resulting in "clinical equipoise" regarding this intervention, Dr. Romagnuolo explained at the meeting sponsored by the Canadian Association of Gastroenterology. But his study is the first to stratify patients by risk, revealing an important consideration for future trials, he said.

It remains unclear why the therapy might have potential benefit in high-risk patients while being potentially harmful in average-risk patients, but one theory focuses on its impact on ischemic injury, he said. Allopurinol is a xanthine oxidase inhibitor and an antioxidant with antiapoptotic effects. "It can mediate capillary endothelial injury, which may be an early step in the pathogenesis of pancreatitis, especially ischemic pancreatitis. There may be more inflammation and capillary injury in high-risk patients that the allopurinol could help. But allopurinol has some propancreatitis factors that we don't know about, which, in average patients, may be enough to increase their risk."

Pancreatitis is the most common complication of ERCP, with an overall incidence of 2%-15% and a related mortality of 0.1%-0.5%, Dr. Romagnuolo said. High-risk patients can have post-ERCP pancreatitis rates as high as 20%, underlining the importance of future investigation into the potential benefits of allopurinol prophylaxis in this population, he concluded.

Return to Normal Diet OK in Mild Pancreatitis

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.

"Early feeding appears 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. But the potential benefits of an early return to oral feeding, such as stimulated bowel function and reductions in both systemic inflammation and bacterial overgrowth, led to the idea of restarting patients on oral nutrition as soon as possible.

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 about 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.

Consenting 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 were no significant differences in the rates of narcotic use, organ failure, pancreatic necrosis, or multisystem organ failure among the three groups.

But 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 the 22 patients who were quickly placed on a regular diet, compared with 5.8 days among 22 patients who were NPO, Dr. Badalov reported. The 18 patients treated with semi-elemental formula had a median length of stay of 3.9 days, which was not significantly different from the other two groups.