

LETTER

Early ERCP in Acute Gallstone Pancreatitis without Cholangitis: A Need for Systematic Biliary Sphincterotomy!

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Dear Sir:

The meta-analysis, conducted by Dr. Uy and his colleagues [1] and featured in the May 2009 issue of JOP, attempted to assess the success of early intervention in acute gallstone pancreatitis *versus* conservative management. In this meta-analysis, the authors initially evaluated seven prior studies before including two studies in their final meta-analysis. The conclusions stated in this meta-analysis were that “there is a trend toward more mortality from early ERCP with or without sphincterotomy in the setting of acute gallstone pancreatitis without cholangitis”. It is our opinion that this meta-analysis and its subsequent findings are rendered ineffectual due to the lack of systematic use of biliary sphincterotomy in patients presenting with gallstone pancreatitis.

The two studies included in the meta-analysis concluded that conservative management was equivalent to early invasive management of acute gallstone pancreatitis. Oria *et al.* [2], stated that their study failed to demonstrate a benefit to early endoscopic management once cholangitis was excluded. This study included 103 patients, 52 of which received conservative therapy. Of the 52 who received conservative management, two ultimately required ERCP with sphincterotomy to relieve obstructive jaundice or treat cholangitis. No mention is made of cholangitis or obstructive jaundice developing in the group receiving early endoscopic management. Furthermore, the total three month mortality was three in the early endoscopic intervention group, one of which was admitted with multi-organ failure and significant pancreatic necrosis (greater than 80%).

Another mortality in the early endoscopic intervention group occurred due to complications in a patient who received elective biliary surgery. The final mortality occurred in an 80-year-old female patient with a (predicted) severe attack of gallstone pancreatitis. The one death in the conservative management group occurred in a patient with severe pancreatic necrosis at presentation. While analyzing the Oria *et al.* [2] study, it is evident that one mortality only can be attributed directly to ERCP with endoscopic sphincterotomy.

The risk of obstructive jaundice and cholangitis is further demonstrated in the second study quoted in the meta-analysis of Dr. Uy, *et al.* [1]. In the study conducted by Folsch *et al.* [3], the authors noted an increased mortality in patients who received invasive treatment *versus* conservative treatment for acute biliary pancreatitis. The study notes 14 deaths in the invasive treatment group (n=126) *versus* 7 mortalities in the conservative management group (n=112). However, only 58 of the 126 patients in the invasive treatment group received endoscopic papillotomy. The study fails to mention how many mortalities occurred in patients in the papillotomy subgroup. In addition, the invasive management group mortalities occurred in ten patients with acute gallstone pancreatitis. Of the mortalities in the invasive group, eight patients experienced respiratory failure, six experienced renal failure, and one patient died with jaundice (patients were included in multiple categories; thus explaining the total of fifteen). In the conservative management group, 22 patients eventually required ERCP within three weeks of presentation, and 13 of these patients eventually received sphincterotomy. Overall, 32 episodes of jaundice or cholecystitis occurred in the conservative management group; four of which died. The study's primary failure is to identify the number of mortalities occurring in the subgroup of patients who received endoscopic sphincterotomy as treatment for acute biliary pancreatitis. Furthermore, the study fails to identify the number of mortalities directly attributed to the delay of relieving biliary obstruction in the conservative management group.

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After analyzing the two studies included in meta-analysis made by Dr. Uy et al. [1], it is clear that the trend toward increased mortality in patients undergoing endoscopic intervention cannot be fully attributed to the early endoscopic intervention. Both key studies also fail to show a definite increased mortality (or trend toward increased mortality) associated with endoscopic biliary sphincterotomy *versus* endoscopic management without sphincterotomy. Finally, multiple patients in both studies required eventual conversion to endoscopic therapy with biliary sphincterotomy in order to treat cholangitis or obstructive jaundice. As a result, it is our belief that all cases of suspected gallstone pancreatitis with known or suspected choledocholithiasis should have systematic biliary sphincterotomy.

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