Systematic Biliary Sphincterotomy in Acute Gallstone Pancreatitis without Cholangitis?

Manley C Uy, Virgilio P Banez, Ma Lourdes O Daez, Peter P Sy, Wendell Z Espinosa, Marilyn C Talingdan-Te

Section of Gastroenterology, Department of Medicine, Philippine General Hospital, University of the Philippines. Manila, Philippines

Many thanks to Drs. Shrode and Kahaleh for their comments [1] on our paper "Early ERCP in acute gallstone pancreatitis without cholangitis: A meta-analysis" [2]. They have raised an argument for biliary sphincterotomy which deserves further comment.

Drs. Shrode and Kahaleh [1] noted correctly that two out of the three mortalities in the early ERCP group of the Oria study [3] were not reported to be directly due to ERCP. However, it is worthwhile to take into consideration that one mortality was attributed to progressive respiratory failure despite early ERCP and sphincterotomy. Taking note that the incidence of severe and mild pancreatitis and other demographic and clinical characteristics were grossly the same in both groups, only one patient died in the early conservative group. Furthermore, both groups had the same number of patients undergoing surgery (45 early ERCP vs. 47 early conservative, respectively) but nobody in the early conservative group died from biliary surgery as compared to the mortality in the early ERCP group which was attributed to elective biliary surgery. it was interesting that there was the absence of mortality in the early conservative group despite more complicated surgeries due to the larger number of patients necessitating transcystic ductal stone clearance and/or laparoscopic/open choledochotomy for main bile duct stones (one in the early ERCP vs. 19 in the early conservative management group). The large number of early conservative management patients with positive intraoperative cholangiography (40%), meaning persistent common bile duct stone, also raises

Received September 15th, 2009

Key words Cholangitis; Gallstones; Pancreatitis, Acute Necrotizing; Sphincterotomy, Endoscopic

Correspondence Manley C Uy

Gastrointestinal Clinic, 1st floor, Central Block, Philippine General Hospital, Taft Avenue, Ermita 1000, Manila, Philippines

Phone: +63-2.567.2983; Fax: +63-2.567.2983

E-mail: sutzeran@yahoo.com

Document URL http://www.joplink.net/prev/200911/12.html

doubts as to the need for early ERCP with sphincterotomy [3]. As to the study of Folsch et al. [4], although Drs. Shrode and Kahaleh [1] correctly noted that 22 patients in the early conservative management group required ERCP and that four patients died from cholecystitis and/or jaundice, they failed to note that there were fewer patients who died from respiratory and renal failure than in the early ERCP group. The two aforementioned organ failures are both possible complications of acute pancreatitis. This was in a background of the same demographic characteristics (including severity of pancreatitis) [4]. Also, the fact that multiple conservatively managed patients eventually need ERCP with sphincterotomy is not the issue; it is the timing of the intervention and not just the need for it.

Drs. Shrode and Kahaleh [1] were also correct in saying that both studies failed to note mortalities according to whether or not sphincterotomy was carried out. However, Oria et al. [3] did have information regarding morbidities in the setting of sphincterotomy. Though there was no significant differences between the two groups in the incidence of organ failure on admission and of new or persisting organ failures, all five patients in the early ERCP group who developed new organ failures and four out of the five patients who had persistent organ failures had morbidiries [3]. In the study of Folsch et al. [4], papillotomy in the early ERCP group resulted in 2 episodes of bleeding. There were no complications of papillotomy in the early conservative management group [4]. If sphincterotomy was really needed and helpful, there should have been better numbers in the sphincterotomy group. As it is, the data is in favor of early conservative management despite the fact that there were more patients in the early ERCP group of both studies undergoing sphincterotomy (74.5% in the Oria study [3] and 46% in the Folsch study [4]).

Biliary sphincterotomy, even in the absence of pancreatitis, is not without risks. It can result in

bleeding, perforation, cholangitis and pancreatitis itself [5]. Admittedly, endoscopic expertise plays a major role in the outcome, but only a minority of endoscopists achieve an adequate volume of cases to become experts, and referral to specialized centers is usually not feasible [3, 6]. Therefore, we could not just recommend that all cases of gallstone pancreatitis confirmed) undergo (suspected or sphincterotomy. We reiterate our suggestion that more evidence is needed from adequately powered randomized placebo-controlled multicenter studies using patients diagnosed with a standardized definition of gallstone acute pancreatitis plus confirmed choledocholithiasis but without obstructive jaundice and/or acute cholangitis presenting within a clearly defined period after onset of the disease. In the meantime, it might be prudent not to carry out early ERCP with or without endoscopic sphincterotomy in patients with gallstone acute pancreatitis unless there is at least a slight suspicion of cholangitis or persistent ampullary obstruction [2].

Potential conflict of interest None known

References

- 1. Shrode CW, Kahaleh M. Early ERCP in acute gallstone pancreatitis without cholangitis: a need for systematic biliary sphincterotomy! JOP. J Pancreas (Online) 2009; 10:701-2. [PMID 19890200]
- 2. Uy MC, Daez ML, Sy PP, Banez VP, Espinosa WZ, Talingdan-Te MC. Early ERCP in acute gallstone pancreatitis without cholangitis: a meta-analysis. JOP. J Pancreas (Online) 2009; 10:299-305. [PMID 19454823]
- 3. Oría A, Cimmino D, Ocampo C, Silva W, Kohan G, Zandalazini H, Szelagowski C, Chiappetta L. Early endoscopic intervention versus early conservative management in patients with acute gallstone pancreatitis and biliopancreatic obstruction: a randomized clinical trial. Ann Surg 2007; 245:10-7. [PMID 17197959]
- 4. Fölsch UR, Nitsche R, Lüdtke R, Hilgers RA, Creutzfeldt W. Early ERCP and papillotomy compared with conservative treatment for acute biliary pancreatitis. The German Study Group on Acute Biliary Pancreatitis. N Engl J Med 1997; 23:237-42. [PMID 8995085]
- 5. Leung J. Chapter 3 Fundamentals of ERCP. In Cotton P, Leung J, editors. Advanced Digestive Endoscopy:ERCP.
- 6. Cotton P. Chapter 2 ERCP training, and assessment. In Cotton P, Leung J, editors. Advanced Digestive Endoscopy: ERCP. Massachusetts:Blackwell, 2005:9-16.