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Cholecystectomy in mild acute biliary pancreatitis: The sooner; the better

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Clinical guidelines for the treatment mild acute biliary pancreatitis (ABP) recommend performing cholecystectomy early –during the first three days– at admission or, if that is not possible, during the first three weeks following the onset of pancreatitis (1,2). Notably only 23% of patients had undergone cholecystectomy during the index hospital admission (3,4).

Scientific evidence has been based on retrospective studies, audits of clinical outcomes and systematic reviews (3,5). There are only two prospective randomized trials comparing early and delayed cholecystectomy although each had different objectives (6,7).

The arguments against performing early cholecystectomy are based on the alleged greater difficulty as a result of pancreatic edema, a higher rate of conversions to open surgery and the limited possibilities of assessing the degree of severity of the pancreatitis at this time (3,8).
In contrast, delay of cholecystectomy has been associated with the recurrence of pancreatitis in between 33% and 63% of cases and a higher rate of readmissions (18%) due to complications from the lithiasis (biliary colic, cholangitis, choledocholithiasis) (9-11).

In this issue of *The Spanish Journal of Gastroenterology (Revista Española de Enfermedades Digestivas)*, Bejarano et al. (12) analyze for the first time in our country the consequences of delaying cholecystectomy in ABP. The authors prospectively study the recurrence of pancreatitis and biliary complications in a cohort of 282 patients with ABP, in whom cholecystectomy was delayed (median: 97 days, P_{25} 60 - P_{75} 173), and report recurrence of the pancreatitis in 46 patients (15.5%) and of biliary complications in 29 patients (9.7%) with a readmission rate of 27.3%, an incidence higher than the 17% reported by Da Costa and other authors, perhaps because the delay was greater (median: 97 days) (7).

It is worth pointing out that endoscopic retrograde cholangio-pancreatography was performed in 22% of patients, a figure similar to that in the Da Costa study, and inferior to the 39% reported by Van Baal (3,7). In this subgroup of patients, Bejarano et al. report no cases of recurrence of the pancreatitis, while Da Costa found a relapse rate of 17%. Although sphincterotomy may reduce the recurrence of pancreatitis, it does not guarantee that no subsequent biliary complications will occur (3,9,10).

The study by Bejarano et al. highlights one of the failings of health systems, that of providing services at the most appropriate time which is no less important than ensuring safety, efficacy, efficiency, patient-centered care and team work (13).

A recent study has estimated a saving of 1.003€ per patient when cholecystectomy is performed early and a reduction of costs of 3.4 million €/year in the National Health Service (UK) (14).

Acute pancreatitis is the third leading cause of hospital admissions in gastroenterology and its clinical management in the first 72 hours continues to be a clinical challenge (15). Since 1988, more than 30 clinical guidelines and their respective updates have been published.
Given the local and systemic repercussions of ABP, diagnosis and clinical management may require many resources (16). Between 25% and 60% of patients manifest a systemic inflammatory response syndrome (SIRS), although in the majority this resolves in the first 24 hours with appropriate fluid replacement therapy (17-20).

For all these reasons, management of acute pancreatitis should fall under the “bundle of care” model of organization, as has been the case with other complex processes such as sepsis, cerebrovascular accidents, and myocardial infarction, in all of which this principle has been applied, with a resulting improvement in clinical outcomes with lower healthcare costs (avoiding the overuse, underuse and misuse of resources) together with increases in patients satisfaction (21-25).

REFERENCES


Fig. 1. Algorithm for the management of acute biliary pancreatitis. (1) Serum bilirubin > 4 mg/dL or dilated common bile duct on day 2 (EUS; MRCP); (2) Endoscopic cholangiogram/Endoscopic sphincterotomy (adapted from Wilson CT, reference 11).