

# Isolated Pancreatic Anastomosis Can Avoid Devastating Outcomes of Hepaticojejunostomy Leakage after Pancreatoduodenectomy

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## Dear Editor,

We read the article by Jester and colleagues in the June 2017 Journal of Gastrointestinal Surgery issue, titled "The impact of hepaticojejunostomy leaks after pancreatoduodenectomy: A devastating source of morbidity and mortality" [1].

We were interested in reading the results of their study, which found that hepaticojejunostomy leaks confer increased morbidity and mortality, especially when associated with pancreatic fistula, because we too observed a high mortality rate in these situations in the 1970s. As surgeons from previous generations may recall, the mortality after pancreatoduodenectomy was extremely high during this period of time [2]. We observed that mortality was extremely high in patients with combined biliary and pancreatic fistulas. Our hypothesis was that biliary secretion somehow activated the pancreatic juice, making this usually benign complication extremely hazardous for the patient. Using this rationale, we devised a modified technique for reconstruction of the alimentary tract using two separated jejunal loops for biliary and pancreatic anastomosis. This resulted in an immediate reduction of mortality and morbidity [3,4]. This technique has become our standard method of reconstruction, and it was the subject of several comparative studies which concluded that separation of the biliary and pancreatic conduits may decrease the severity of pancreatic fistulas, therefore reducing the morbidity and mortality of pancreatoduodenectomy [5-7]. A recent prospective randomized study showed that this technique is not associated with a lower incidence of pancreatic fistula compared to conventional reconstruction. However, and maybe much more importantly, the authors do indicate that this technique may contribute to decreasing fistula severity, the duration of the hospital stay, and hospital expense [8].

Recently, as we initiated our procedure for laparoscopic pancreatoduodenectomies, this technique was adapted for the new era [9], as we not only understood the importance of the isolated pancreatic anastomosis to decrease the severity of pancreatic fistulas but also expected difficulties during the long learning curve of laparoscopic pancreatoduodenectomy. Indeed, we did not experience any fatality during our first 50 laparoscopic cases, even in cases with hepaticojejunostomy leaks [10]. The actual impact of hepaticojejunostomy leaks can only be verified when a large cohort of patients, such as that of Jester and colleagues [1], studied, and therefore, we congratulate the authors on this important study. This is indeed a rare but threatening complication in which the impact can be minimized if techniques using isolated pancreatic anastomosis are employed. Pancreatoduodenectomies are now being performed with minimally invasive techniques and by low volume centers. The number of procedures is growing

exponentially, and with it, a trend towards higher morbidity and mortality rates is occurring [11]. Any contribution to reduce the impact of such complications is welcome.

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