

## Role of ERCP in acute biliary pancreatitis: yet unanswered



We read with great interest the article by Novikov et al. where they reported that endoscopic retrograde cholangiopancreatography (ERCP) decreased in-hospital mortality and length of hospital stay in patients of acute gall stone-induced pancreatitis without cholangitis (AGPNC) [1].

Biliary stones causing transient obstruction at the ampulla is postulated as the triggering event for AGPNC [2]. Thus, it was earlier believed that an urgent ERCP and biliary decompression might ameliorate and modify the disease course. However, previous studies failed to show a benefit for urgent ERCP in terms of mortality and complications in patients without evidence of cholangitis [3]. The current study reported an overall mortality benefit in patients who underwent ERCP compared to those who did not. However, there was no difference in mortality between those who underwent urgent ERCP (<24 hours) vs delayed ERCP (>24 hours). The authors theorize that reduced in-hospital mortality occurred in patients who underwent ERCP between days 3 and 9 and cited initial resuscitation as the reason for the improved mortality. However, the initial treatment for AGPNC is fluid resuscitation and supportive care regardless of whether a patient needs ERCP, unless there is evidence of cholangitis, in which case, antibiotics are needed. ERCP can reduce mortality in patients with persistent cholestasis and cholangitis/sepsis which were excluded in the current study [4]. Thus, the likely reason for benefit of ERCP in the current population is unclear. Although the supplementary table contains codes for details of the ERCP procedures, details about cholangiogram findings and subsequent sphincterotomy and drainage/stenting were not included in the results. Those data probably would have shed some light on the indications and the mechanism of purported benefit of delayed ERCP.

Further, although there was a mortality benefit with ERCP, the duration of hospital stay was prolonged in patients undergoing ERCP, which are two contradictory outcomes and difficult to explain. Also, the number of patients with organ failure and severe pancreatitis at the time of admission was higher in the group that did not have ERCP compared to the intervention group, thus resulting in an apparent mortality benefit in the intervention group. Also, the average length of hospital stay was 5.9 days and the overall mortality was just 1.56%, both of which are very low compared to previously reported large case series, which suggests that a majority had mild disease [5]. Thus, even if there is a benefit, the results cannot be generalized to patients with typical cases of pancreatitis.

In light of these concerns, we believe that the final word is not yet out, and we still need to await the results of large prospective studies to better understand the risks and benefits of ERCP in AGPNC.

### Competing interests

The authors declare that they have no conflict of interest.

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