



Opinions

One-stop shop endoscopy for patients with biliary pancreatitis: A Jack of all trades?

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Dear Editor,

Acute biliary pancreatitis (ABP) is associated with biliary obstruction; hence an urgent endoscopic biliary decompression appears to be the intuitive treatment. However, whether and when to perform endoscopic retrograde cholangiography (ERC) in ABP still remains a clinical dilemma encountered when patients present with suspected ABP. Especially in the context of ABP, laboratory evidence of biliary obstruction and/or acute cholangitis lacks specificity. In the recent APEC trial, Schepers et al. [1] demonstrated that urgent ERCP with sphincterotomy in patients with severe gallstone pancreatitis, but without cholangitis, does not improve patient outcome compared with conservative treatment. The Dutch Pancreatitis Study Group is to be congratulated for the most recent addition to their portfolio of landmark studies, i.e., the APEC-2 trial [2] - a prospective multicentre cohort study comparing prospective endoscopy interventions with the patients treated within the APEC trial.

The authors of the APEC-2 study prospectively included patients with predicted severe acute biliary pancreatitis (PSABP) without cholangitis. All patients ($n = 83$) underwent an urgent endoscopic ultrasound (EUS), followed by ERC with endoscopic sphincterotomy (ES) in case of common bile duct stones/sludge, within 24 h after hospital presentation and within 72 h after symptom onset. Clinical outcomes in this group were compared to the control group ($n = 113$) from the APEC trial arm [1] where patients were treated conservatively. The study found that urgent EUS in patients with PSABP, followed immediately by ERCP with ES in the case of confirmed bile duct stones/sludge, did not reduce the composite endpoint of major complications or mortality as compared with the conservative arm either [2].

EUS is a rapid and accurate tool for assessing extrahepatic bile ducts. Therefore, one would expect that EUS-guided interventions should help to select patients with ABP for the invasive stone extraction. Moreover, EUS offers the option of performing ERC during the same visit in endoscopy, and some clinicians might prefer this tool to magnetic resonance cholangiopancreatography (MRCP) - a noninvasive method for evaluating biliary obstruction [3]. Although a 2017 meta-analysis [4] showed high diagnostic performance for both modalities (sensitivity 97 % vs. 90 % and specificity 87 % vs. 92 % for EUS and MRCP, respectively), urgent EUS-guided ERC did not reduce the composite endpoint of major complications or mortality, as compared with the APEC control group [2].

ERC is an invasive procedure associated with significant risks and should be performed when biliary obstruction, caused by biliary stones, is confirmed. Cholangitis and sepsis might guide ERC timing, but the presence of biliary obstruction remains crucial to consider this invasive procedure. Laboratory evidence of biliary obstruction or cholangitis lacks accuracy and may prompt unnecessary ERC. As a note of caution, a recent analysis of routine data of the statutory health insurance in Germany [5] identified the proportion of unnecessary ERC among 33,326 adult patients with diagnosis of bile duct stones or biliary pancreatitis, but cholangitis or obstruction not recorded, to be at least 7 % (and as high as 22 % when not specifying acute pancreatitis and not excluding emergency admissions). Hence, we reckon that the best indication and timing of the combined endoscopic approach in biliary pancreatitis are yet to be studied in randomized controlled trials.

Declaration of interests

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