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Cholangitis after endoscopic retrograde cholangiopancreatography: a rare complication?

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Dear Editor,

Cholangitis does not often occur after endoscopic retrograde cholangiopancreatography (ERCP), but it can be a serious complication of this procedure (1). Its clinical features, management and outcome are poorly characterized in the literature (2). In a recent study in a low-volume center (200 procedures in 22 months) the reported rate of this complication was less than 5%, with a tendency to reduce with increased experience of the practicioner (3). From a total of 487 ERCP performed in two years in our center, 24 patients developed cholangitis after the procedure (4.9% incidence). The majority of patients (54%) were female, with a median age of 60 year of age (interquartile range [IQR]: 42-72 years). The diagnosis was made after a median period of two days (IQR: 1-3 days), with a mortality of 29.2%. The median number of hospitalization days was seven (IQR: 4-16 days), and the majority of patients were attended in the outpatient clinic (71%). Ten patients had already undergone ERCP with sphincterotomy (43%) and seven patients were under antibiotic therapy or had received antibiotics in the previous three months (29%). The main reasons for the procedure were choledocholitiasis (38%) and obstructive jaundice (29%). A dominant stricture was present in 37.5% of cases and one or more biliary

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stents were placed in eleven patients (46%). Fever (75%), abdominal pain (50%) and jaundice (42%) were the main clinical manifestations. However, Charcot's triad was only present in three patients (13%). Almost all patients (92%) were treated with antibiotics, and this was within the first 24 hours in 86% of cases. Half of the patients had positive blood cultures. The duration of hospitalization (17 vs 6 days, p = 0.001) and higher levels of gamma-glutamyl transferase (651 vs 137 U/L, p = 0.04), alkaline phosphatase (459 vs 180 U/l, p = 0.03) and total bilirubin (12 vs 3 mg/dl, p = 0.02) were significantly associated with mortality.

In our experience, post-ERCP acute cholangitis developed in approximately 5% of cases with a not negligible mortality of nearly 30% in spite of antibiotic therapy. Analytical factors can help to identify the most serious cases that could benefit from a more aggressive approach.

References

1. Bai Y, Gao F, Gao J, et al. Prophylactic antibiotics cannot prevent endoscopic retrograde cholangiopancreatography-induced cholangitis: A meta-analysis. Pancreas 2009;38(2):126-30. DOI: 10.1097/MPA.0b013e318189fl6d

2. Kwon CI, Song SH, Hahm KB, et al. Unusual complications related to endoscopic retrograde cholangiopancreatography and its endoscopic treatment. Clin Endosc 2013;46(3):251-9. DOI: 10.5946/ce.2013.46.3.251

3. Riesco-López JM, Vázquez-Romero M, Rizo-Pascual JM, et al. Efficacy and safety of ERCP in a low-volume hospital. Rev Esp Enferm Dig 2013;105(2):68-73. DOI: 10.4321/S1130-01082013000200002