Cholangitis after endoscopic retrograde cholangiopancreatography: a rare complication?

Key words: Retrograde cholangiopancreatography. Cholangitis. Complication.


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 practitioner (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 years 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 choledocholithiasis (38%) and obstructive jaundice (29%). A dominant stricture was present in 37.5% of cases and one or more biliary 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.

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References