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The Emergency Endoscopic Treatment in Acute Cholangitis

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Abstract

Background: Acute cholangitis is a systemic disease caused by acute inflammation and infection of the biliary tree and carries significant morbidity and mortality rates. The most common cause of acute cholangitis is choledocholithiasis, which can lead to an increased death rate in severe forms and in the absence of appropriate treatment. The clinical Charcot's triad is outdated due to low sensitivity and has been replaced with the criteria established by the Tokyo guidelines. The criteria of diagnosis are based on the presence of systemic inflammation, cholestasis and/or jaundice and biliary obstruction documented by imaging studies. Depending on the severity of the disease, treatment varies from antibiotic therapy to emergency endoscopic biliary drainage. In severe cases the first-line treatment is achieved by endoscopic retrograde cholangiopancreatography (ERCP).

Method: To evaluate the effectiveness of urgent ERCP treatment in patients with acute cholangitis, a retrospective data analysis was performed of 185 patients that underwent endoscopic interventions between 2018 and September 2020, 74 patients of which have been identified with different grades of acute cholangitis.

Results: The studied group consisted of 42 women (56.7%) and 32 men (43.3%), with a mean age of 62.2 (38-93) years. Obstructive choledocholithiasis was as the main cause of cholangitis (44 patients, 59.5%), with varying degrees of severity - grade I (41, 55.4%), grade II (22 patients, 29.7%) and grade III (11 patients, 14.8%). For cases with grade II and III of severity (33 patients, 44.5%), the endoscopic intervention took place in the first 12-24 hours after admission. Patients that had endoscopic dezobstruction in the first 12-24 hours had normal blood tests in 4.7 days (mean) and 5.8 days (mean) of hospital stay while patients that had dezobstruction more than 24 hours after admission had normal blood tests in 6.3 days (mean) and 7.6 days of hospital stay. Mortality was 5.4%, all 4 patients having grade III severity cholangitis.

Conclusion: Patients that benefited from endoscopic biliary drainage in the first 24 hours after admission had a faster recovery, decreased duration of antibiotic therapy, decreased duration of hospital stay, lower morbidity and mortality rate compared to those that suffered the intervention more than 24 hours after admission.

Key words: acute cholangitis, endoscopic retrograde cholangiopancreatography, choledocholithiasis