1130-0108/2009/101/12/837-849
REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS

REV ESP ENFERM DIG (Madrid)
Vol. 101. N.° 12, pp. 837-849, 2009

Adverse events of ERCP at San José Hospital of Bogotá (Colombia)

A. Peñaloza-Ramírez, C. Leal-Buitrago and A. Rodríguez-Hernández

Service of Gastroenterology and Digestive Endoscopy. San José Hospital. Health Sciences University Foundation. Bogotá Surgery Society. Bogotá, Colombia

ABSTRACT

Endoscopic retrograde cholangiopancreatography (ERCP) has become the preferred treatment method for hepatobiliary and pancreatic disease. Despite technological progress this technique continues to account for the greatest morbidity and mortality caused by digestive endoscopic procedures. ERCP carries a risk of pancreatitis, perforation, hemorrhage, cholangitis and cardiopulmonary events occurring in upto 10% of patients in referral centers, implying a mortality of up to 1%, not including therapeutic failures or the need for re-intervention. A greater mortality rate has been demonstrated in prospective studies rather than in retrospective studies, but overall, the number of complications described in the literature is much lower than the number of complications that actually occur.

A descriptive prospective study was conducted at San José Hospital from April 1, 2006 to April 30, 2007 in patients who underwent an ERCP and had a 1-month follow-up. A total of 381 patients were included; 9 (2.3%) were excluded, and of the remaining 372 there was an overall success in 79.6% of cases, 8.3% had a second intervention, 7.6% developed complications (pancreatitis, perforation, hemorrhage, cholangitis, pain, intolerance to sedatives, and cardiopulmonary events), and 4.3% were failed ERCP studies. The mortality rate of the ERCP procedure was 0.8%.

ERCP-related complications were determined at a teaching center, and this suggests the need to implement centers of excellence in order to improve the efficacy of the procedure.

Key words: ERCP. Complications. Mortality.

Received: 02-02-09.
Accepted: 07-07-09.

Correspondence: A. Peñaloza-Ramírez. Calle 118 No. 12-25 (apto 302). Bogotá, Colombia. e-mails: apenaloza@fucsalud.edu.co; carlosleal73@gmail.com

Peñaloza-Ramírez A, Leal-Buitrago C, Rodríguez-Hernández A. Adverse events of ERCP at San José Hospital of Bogotá (Colombia). Rev Esp Enferm Dig 2009; 101: 837-849.

INTRODUCTION

Endoscopic techniques have become the gold standard for diagnostic and therapeutic interventions for biliary and pancreatic diseases. The current use of ERCP is mainly therapeutic and only in some very special circumstances is it done for diagnostic purposes (1-5). ERCP is the most complex digestive endoscopy technique. ERCP complexity carries a morbidity rate of up to 10% and a mortality rate of up to 1% (6-9).

A complication is defined as an adverse or undesirable event that may or may not have a precipitating cause and does not that imply a medical error or medical negligence. An adverse event occurring within 30 days following the procedure is considered an early ERCP-related complication. Complications from endoscopy are defined as general complications or they may be specific to the type of procedure (6,7). ERCP complications were classified at the 1991 consensus conference into 3 categories: mild, requiring up to 3 days' hospitalization; moderate, requiring 4 to 10 days' hospitalization; and severe, requiring more than a 10 days' hospitalization, radiologic or surgical intervention or causing death. Mortality attributable to this procedure was defined as that which occurred within 30 days after the procedure or complication.

ERCP-related complications include acute pancreatitis, post-sphincterotomy bleeding, biliary sepsis (cholangitis and cholecystitis), perforation and side effects of sedatives (arrhythmias and hypoxemia) (6-8). In recent years ERCP-related pain has been regarded as an adverse event when it is a typical 24-hour abdominal pain occur-