

Incidence of Unspecified Bile Duct Strictures in Endoscopic Retrograde Cholangiopancreatography

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Introduction. Bile duct strictures are narrowing of any cause of the biliary duct. Strictures may be either benign or malignant and can be found at any location along the bile duct. Common causes are single acute injury, pancreatitis, choledocholithiasis, primary sclerosing cholangitis or pancreatic tumors. An essential tool in diagnostics and therapy of bile duct strictures is endoscopic retrograde cholangiopancreatography (ERCP). However, there is a sizeable proportion of patients with biliary strictures of unknown etiology which remains unspecified after performing ECPR. Bile duct strictures are considered indeterminate if in neither ERCP, nor abdominal imaging the proper diagnosis is made and the origin found.

Aim, Materials and Methods. The aim of the study is to evaluate incidence of unspecified bile duct strictures found in ERCP in a two-year period.

Retrospectively, all consecutive patients with ERCP performed due to disturbed bile drainage in 2015 and 2016 were identified by Endoscopy database search in a single university hospital in Latvia. Patients with indeterminate bile duct strictures were selected. Radiology findings of the latter were evaluated and patients with a pancreatic tumor, pancreatitis, cholecystitis, choledocholithiasis or strictures of iatrogenic origin confirmed by imaging studies were excluded. Information was summarized and incidence of unspecified bile duct strictures analyzed.

Results. In the two-year period of 2015 and 2016 there were 827 ERCP procedures performed, in 181 patients (21.8%) – 106 females and 75 males – biliary strictures without a known origin at the moment of ERCP were found. The mean age of the patients with initial unspecified biliary strictures was $65.2 \pm$ standard deviation (SD) of 16.8 years. Out of them 97 (11.7%) patients – 59 females, mean age $69.8 \pm$ SD of 14.3 years and 38 males, mean age $65.7 \pm$ SD of 14.8 years – were left without a proven cause of bile duct strictures in radiology imaging.

Conclusions. There were 827 patients undergoing ERCP procedure in 2015 and 2016, indeterminate biliary strictures were found in 181 (21.8%) patients. Undetermined biliary strictures with no cause determined either in ERCP or radiological imaging were found in 97 out of 827 patients undergoing ERCP. The acquired data make the incidence of unspecified bile duct strictures to be 11.7% among the patients undergoing ERCP in two consecutive years of 2015 and 2016 in a single university hospital in Latvia.