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**POST-ERCP PANCREATITIS:  
INCIDENCE, SEVERITY AND MORTALITY**

**ЕРХПГ-ПАНКРЕАТИТ:  
ЧАСТОТА РОЗВИТКУ, ВАЖКІСТЬ ТА ЛЕТАЛЬНІСТЬ**

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**Introduction.** Acute postoperative pancreatitis is one of the most clinically significant complications after ERCP, despite significant progress in the studied mechanisms of this complication, risk factors and methods of prevention [1, p. 40]. Its incidence rate, severity, and mortality remain unknown which is especially important in the modern stage of intensive development of less-invasive surgery methods, changing trends in ERCP use, indications for this intervention and its techniques [2, p. 17]. In recent publications, the frequency of post-ERCP pancreatitis varies from 9,7% to 14,7 %. The severe course of this pathology and mortality are relatively rare, the mortality rate varies up to 0,7% [ 3, p. 145; 2, p. 17]. Risk factors for the development of post-ERCP pancreatitis require further in-depth study, which will allow to develop an effective program of perioperative management of patients in the future. To study them, a detailed analysis of the clinical data of patients who underwent transpapillary endoscopic interventions with ERCP is necessary.

**The purpose** of our work was to determine the frequency of performing transpapillary endoscopic interventions and the incidence of post-ERCP pancreatitis, its severity and fatal outcomes in a specialized surgical center of a tertiary level hospital.

**Materials and methods.** We carried out a prospective analysis of the medical records of patients who underwent endoscopic transpapillary interventions on the basis of Vinnytsia regional Pirogov memorial clinical hospital in 2020. The diagnosis of ERCP-pancreatitis was formulated according to ESGE recommendations, which defines ERCP-pancreatitis as a condition, characterized by the appearance or intensification of gnawing pain in the abdomen in combination with an increase in pancreatic enzymes

(amylase or lipase more than three times higher than the upper limit of the norm, which becomes the reason for hospitalization after ERCP or prolongation of the planned hospitalization of the patient [4, p. 3]. The severity of ERCP pancreatitis was determined according to the 2012 Atlanta guidelines for acute pancreatitis, as most authors do, since currently there are no recently revised severity criteria for post-ERCP pancreatitis [5, p. 107]. According to Atlanta criteria three forms of severity of post-ERCP pancreatitis were determined: mild, moderate and severe. The severity criteria were the presence of local and/or systemic complications and the presence of organ dysfunctions and its duration.

**Results and their discussion.** In total, in 2020 on the basis of Vinnytsia regional Pirogov memorial clinical hospital endoscopic transpapillary interventions were performed in 137 patients, among which more than half of all patients were women – 60,6%(83), men, respectively, 39,4%(54). Benign diseases were dominant in the group of reasons for endoscopic interventions – 78,1% (107), malignant diseases accounted for 21,9% (30), respectively.

In the structure of indications before performing endoscopic transpapillary interventions, the following were dominant: gall bladder stone with acute cholecystitis – 70(51,1%), gall bladder stone without acute cholecystitis – 5(3,7%), bile duct stone – 7(5,1%), postcholecystectomy syndrome – 22(16,1%), malignant neoplasm of the head of the pancreas – 12(8,8%), malignant neoplasm of the extrahepatic bile ducts – 6(4,4%), malignant neoplasm of the papilla of Vater's – 6(4,4%), other causes – 6(4,4%). After performing endoscopic transpapillary interventions in the postoperative period, ERCP-induced pancreatitis developed in 25 (18,28%) cases. The average age of patients with post-ERCP pancreatitis was  $59,2 \pm 13,1$  years. In its structure, women significantly dominated over men – 18(72%) and 7(28%), respectively ( $p < 0,05$ ). The average age of women with post-ERCP pancreatitis was  $59,2 \pm 13,1$ , men –  $64,17 \pm 11,27$  years.

Regarding the distribution of patients according to the severity of the course of post-ERCP pancreatitis, in 68%(17) this complication had a mild clinical course, in 28%(7) it was moderate, and in 4%(1) it was severe. A patient with a severe course of post-ERCP pancreatitis also developed postoperative bleeding and obstruction of the common bile duct with a blood clot after endoscopic intervention, which became an indication for open surgical intervention. There were no deaths among all patients with post-ERCP pancreatitis.

**Conclusions.** Post-ERCP pancreatitis is a predicted complication after endoscopic transpapillary interventions, its incidence rate was 18,28%, the structure of this complication was dominated by women, whose age was greater than the average age of men. The mild course of ERCP-pancreatitis is

dominant among other forms of the severity of this complication. Severe post-ERCP pancreatitis was isolated, there was no mortality from given pathology.

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