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TRENDS IN THE DEVELOPMENT OF SCIENCE AS THE MAIN WAY TO REPLACE OLD TECHNOLOGIES

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REASONING FOR CHOOSING A METHOD OF PALLIATIVE SURGICAL TREATMENT OF UNRESECTABLE PANCREATIC HEAD CANCER

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The incidence of pancreatic cancer increased from 5 per 100,000 to 45 years, to 30.0 per 100,000 in those aged 60–64 years, and 93.7 per 100,000 in those aged 80–84 years [1]. The incidence in men is about 1.2 times higher than in women [2]. The burden of the disease is the strongest in developed countries compared to developing countries [3]. This difference is probably due to differences in the age structure of the population, as well as access to qualified medical care in different countries [4]. The average one-year survival rate is approximately 20%, and the 5-year survival rate ranges from 8-10% [5]. At the same time, the necessary prerequisites for palliative chemotherapy in this category of patients are internal drainage of the biliary system and restoration of oral nutrition [2]. To solve this problem in practical surgery, there are two main approaches: performance of biliodigestive and gastrodigestive shunting by open surgical intervention and stenting of the bile ducts and duodenum [3]. According to literature data, when using surgical shunting, the frequency of complications reaches 25%, and the mortality rate is 15.7% [4]. In turn, endoscopic stenting of the biliary tract and duodenum is accompanied by a signi"cantly lower number of complications, however, stents (especially endobiliary) are prone to infection, occlusion and migration, which requires repeated interventions with their reimplantation. In addition, in some cases, stenting is technically impossible, especially when the area of occlusion cannot be covered with an endoprosthesis [5].

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The purpose of the study was to improve treatment outcomes of patients with unresectable pancreatic head cancer complicated by obstructive jaundice by improving the tactics and techniques of surgical interventions.

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Materials and methods. The randomised prospective study involved 107 patients with inoperable pancreatic head cancer complicated by obstructive jaundice, who were divided into the main (n=53) and experimental (n=54) groups depending on the treatment tactics. The results of correction of obstructive jaundice by Roux-en-Y end to side hepaticojejunostomy (main group) and common bile duct prosthetics with self-expanding metal stents (experimental group) were compared.

Results. Compared to surgical stenting, the use of SEMS according to the "Accordion Severity Grading System of Surgical Complications" by Strasberg S.M., reduced Grade I-III complications by 24.8% (p<0.001) and Grade IV-VI complications by 2.7% (p<0.001), decreased mortality by 7.5% (p<0.05) and reduced hospital stay from 14 ± 2.1 to 3 ± 0.8 days (p<0.05). Within 8-10 months after the correction of jaundice, 6(11.1%) patients developed recurrent jaundice and cholangitis after SEMS choledochal prosthesis, and 4(7.4%) developed duodenal obstruction. These complications required rehospitalization of patients, intensive care and biliary system replacement in 4 patients and duodenal stenting with duodenal SEMS in 4 patients. In patients who underwent surgical bypass surgery, there was no recurrence of jaundice and development of duodenal obstruction in the long-term postoperative period.

Conclusions. In the palliative surgical treatment of patients with unresectable pancreatic head cancer complicated by obstructive jaundice, drainage of the biliary system by installing SEMS compared to surgical bypass by Roux-en-Y end to side hepaticojejunostomy is accompanied by a decrease in the frequency of postoperative complication by 29.9% (p<0.05) and mortality by 7.5% (p<0.05). However, after the installation of SEMS, 18.5% of patients develop late postoperative complications: recurrence of jaundice due to stent obstruction by a tumor and duodenal obstruction, which requires rehospitalization and reconstructive interventions.

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