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COMPARISON OF THE CLINICAL EFFECTIVENESS OF HEPATICOJEJUNOSTOMY AND SELF-EXPANDING METAL STENTS FOR BYPASSING THE BILE DUCTS IN PATIENTS WITH UNRESECTABLE PANCREATIC HEAD CANCER COMPLICATED BY OBSTRUCTIVE JAUNDICE

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Due to late diagnosis, up to 80% of patients with pancreatic head cancer (PHC) undergo only palliative surgical treatment aimed at eliminating complications such as obstructive jaundice and impaired gastric evacuation [1]. Correction of biliary obstruction is performed by biliodigestive bypass or transpapillary stenting of the common bile duct with self-expanding metal stents (SEMS)[2]. The use of SEMS is characterised by a lower number of postoperative complications, lower mortality and shorter hospital stay [3]. However, due to the high efficiency of modern polychemotherapy regimens, the life expectancy of patients after palliative interventions has increased from 9 to 12-16 months [2]. During this period, biliodigestive shunts retain their drainage function, and SEMS can be bypassed by the tumour, bile acid salts, and bacterial biofilms [3]. As a result, recurrent jaundice and cholangitis develop, requiring repeated hospitalisations and reconstructive interventions [1].

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

Materials and methods of research. The randomised prospective study included 107 patients with locally advanced and unresectable pancreatic head cancer without signs of duodenal obstruction. Depending on the treatment tactics, patients

were randomised to the main group (53 people) or the comparison group (54 people). Patients in the main group underwent correction of obstructive jaundice by biliodigestive bypass using the Roux-en-Y end to side hepaticojejunostomy technique with a 50 cm Roux limb. A prophylactic side-to-side gastrojejunostomy was performed in all patients. Patients in the comparison group underwent transpapillary stenting of the common bile duct with SEMS after endoscopic retrograde cholangiopancreatography.

After surgical treatment in the study groups, the incidence of postoperative complications, mortality and survival were analysed.

Results of the research. In a comparative analysis of the results of surgical treatment of patients, the specific weight of postoperative complications in patients of the main group was 37.3% versus 7.4% in the comparison group ($\chi 2$=13.7, 95% CI 14.38-44.08, p=0.0002)

When analysing the results of treatment of patients in both groups in the period from 4 to 11 months after surgical correction of jaundice, it was found that during this period biliodigestive and gastrojejunal shunts in patients of the main group functioned without complications. However, in 6 (11.1%) patients who underwent SEMS biliary prosthesis, recurrent jaundice and cholangitis developed in the period from 8 to 10 months after stenting. In these cases, 4 patients underwent biliary system replacement, and in 2 cases, jaundice and cholangitis were eliminated by endoscopic stent rehabilitation and antibiotic therapy, taking into account the sensitivity of the bile microflora to antibiotics. In another 4 (7.4%) patients in the comparison group, the course of the disease was complicated by nausea, vomiting, a feeling of heaviness in the epigastrium, and progression of cachexia. According to the results of fluoroscopy and fibrogastroduodenoscopy, patients were diagnosed with duodenal stenosis due to a tumour of the pancreatic head. This complication was eliminated by duodenal stenting with duodenal SEMS. No complications were observed after the procedure, and the evacuation of gastric contents was restored.

Conclusions. The use of self-expanding metal stents for internal drainage of the biliary system compared to hepaticojejunostomy operations reduced the incidence of postoperative complications by 29.9% ($\chi 2$=13.7, 95% CI 14.38-44.08, p=0.0002) and mortality by 7.5% ($\chi 2$=4.16, 95% CI -0.05-17.79, p=0.04). Within 8-10 months after biliary stenting, 11.1% (6/54) of patients developed recurrent jaundice and cholangitis, and another 7.4% (4/54) of patients developed duodenal stenosis with a tumour. These complications led to repeated hospitalisation and biliary restentation in 4 (7.4%) cases, and duodenal stenting by self-expanding metal stents in 4 (7.4%) patients. The choice of biliodigestive shunting method should be selected depending on the expected survival time of patients. If the prognosis of survival is up to 8 months, it is advisable to perform prosthetics of the common bile duct with self-expanding metal stents, if more than 8 months, it is advisable to perform hepaticojejunal anastomosis with prophylactic gastrojejunal anastomosis.

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