The effectiveness of interventional procedures in patients with tumor lesion of bile ducts

Andrian V. Mamoshin^{1,2}, Alexander L. Alyanov^{1,2}, Ksenia Yu. Kandurova¹, Alexey V. Borsukov³, Yuriy V. Ivanov⁴, Vadim F. Muradyan²

¹Research and Development Center of Biomedical Photonics, Orel State University, Orel, Russia ²Orel Regional Clinical Hospital, Orel, Russia

³Problem Scientific-Research Laboratory "Diagnostic researches and miniinvasive technologies" of Smolensk State Medical University, the Ministry of Health of Russian Federation, Smolensk, Russia

⁴Federal Scientific and Clinical Center for Specialized Medical Service and Medical Technologies, Moscow, Russia

In recent decades, there has been an increase in patients with malignant tumors of hepatopancreatoduodenal organs complicated by obstructive jaundice. The problems of diagnosis and treatment of patients with this pathologies continue to be relevant at the present time. Use of interventional procedures to solve these issues is increasing along with endoscopic ones. However, these procedures still require more methods of acquiring of diagnostic information during intervention.

The aim of the work is evaluation of the effectiveness and study of the results of interventional procedures application in diagnostic and treatment of malignant tumors of hepatopancreatoduodenal organs complicated by obstructive jaundice.

Interventional procedures were used in 277 patients with mechanical jaundice syndrome. The causes of mechanical jaundice were: pancreatic head cancer - 160 patients, cholangiocarcinoma - 60 patients, gallbladder cancer - 13 patients, bile papilla cancer - 11 patients, regional metastasis - 32 patients, duodenal cancer - 1 patient. All patients underwent antegrade access to the bile-excreting tracts under ultrasound and X-ray control.

Through the drainage channel, fluorescence spectroscopy and laser Doppler flowmetry methods were used as well. These methods were aimed at assessing metabolic processes, blood microcirculation parameters and pathological changes and condition of tissues blocked and not blocked by tumor.

In each case percutaneous transhepatic cholangiography with percutaneous transhepatic cholangiostomy was performed for closer definition of level and degree of the block. After bilirubin level lowering, further examination and stabilization of patients, the questions of the possibility of performing open surgical treatment, transfer of external cholangiostoma into external-internal one or antegrade endobiliary stenting were decided. For several patients, this type of intervention was the final surgical tool aimed at improving the quality of life. A total of 370 interventional procedures were performed. Complications after the interventions occurred in 64 cases. Lethal outcomes occurred in 21 patients due to the progression of underlying disease and multi-organ failure.

The results of measurements by optical methods showed the sensitivity to the state of tissues, which will be used later for development of new diagnostic criteria and special tooling to provide additional diagnostic information during interventional procedures.

In general, interventional procedures are important modern surgical strategy for treating obstructive jaundice

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makes it possible to early clarify the nature of bile duct obstruction, effectively reduce biliary hypertension, improve the overall condition of patients, and determine a further treatment process.
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caused by malignant tumors of hepatopancreatoduodenal organs. Thus, the use of interventional technologies