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METHOD FOR EARLY DIAGNOSIS OF SUPUPURATION OF ECHINOCOCCAL CYSTS OF THE LIVER

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Summary. To reduce the frequency of intra- and postoperative bleeding and bile leakage, it is recommended to use the drug Hemostop on the liver stump with additional interventions aimed at decompressing the liver stump.

Key words: liver echinococcosis, relapse, reinvasion, forgotten untreated cysts.

Relevance. In recent years, certain successes have been achieved in Uzbekistan in organizing the prevention and treatment of patients with hydatid echinococcosis of the liver. However, the increase in the number of cases of this disease continues [1,20,26,27]. According to the World Health Organization (WHO), the annual cost of treating patients with hydatid echinococcosis is estimated at US$3 billion. Therefore, early diagnosis and treatment of this pathology are currently priorities throughout the world [2,23,24,25].Of the total number of cystic liver formations, hydatid echinococcosis accounts for 65% to 80% of cases. M.A. Nartailakov et al. (2014) note that various complications of the disease are observed in 23-63% of patients [3,9,10,11,12,13,14,15].

There remain many complex and unresolved issues in the choice of treatment tactics for patients with hydatid echinococcosis of the liver [1,20]. At the present stage, according to A.V. Zhao et al. (2016), the surgical method remains the most effective and predictable. Along with laparotomy interventions, in recent years, surgeons have been actively introducing minimally invasive technologies into practice, such as laparoscopic echinococcectomy and puncture-drainage interventions [1,2,3,4,5,6,7,8].

When performing laparoscopic operations, special instruments are required for adequate, complete inspection and sanitation of the cavity of an hydatid cyst, but this issue has not been resolved to date. Therefore, indications for laparoscopic echinococcectomy in most clinics are limited.

The purpose of the study is to improve the results of surgical treatment of recurrent liver echinococcosis.

Material and methods. This work is based on an analysis of the results of a comprehensive examination and treatment of 84 patients with REP who were

hospitalized in the regional hospital of the city of Bukhara from 2021 to 2023. Of this number, 71 (84.5%) patients, after primary surgical interventions, were admitted to the clinic from various medical institutions of the Republic of Uzbekistan and 13 (15.5%) patients were operated on in the clinic. Thus, out of 84 patients with REP, 47 (56%) were urban residents, and 37 (44%) were rural residents, which was due to the increased migration of the rural population over the past 10-15 years.

Research results and discussion. Along with determining the general condition of patients, great importance was attached to "local" aggravating factors that negatively affect the course of the operation and the postoperative period. The clinic used a modified ASA classification with assessment of general and local operational and anesthetic risk factors. As a result of the study, we identified 2 groups of factors influencing the choice of method and volume of repeated comprehensive preoperative preparation of patients with REP. The first group was defined as general operational and anesthetic risk factors, which included concomitant diseases, against the background of which dysfunction of organs and systems developed. These factors determined the severity of the patients' condition, influenced the course of the postoperative period and were a contraindication to radical surgical interventions. The second group was defined as local surgical risk factors and included the depth of recurrent echinococcal cysts, the number, size, presence of complications, the number of relapses and repeat operations, as well as the severity of the adhesive process in the right hypochondrium. These changes create significant technical difficulties for performing radical and palliative surgical interventions and negatively affect the course of the postoperative period and treatment outcome.

According to the improved ASA classification, patients with REP were distributed as follows. According to the improved classification, there were 69 (82.1%) patients with surgical and anesthetic risks P1 and P2, and 15 (17.9%) patients with surgical and anesthetic risks P3-P4. According to the improved ASA classification, patients with risk group P2-P3-P4 underwent comprehensive preoperative preparation. When choosing a repeat surgical intervention, we were guided by objective criteria developed in the clinic, based on the results of a comprehensive examination of patients with REP.

To select the method and volume of reoperation for REP, we were strictly guided by criteria that made it possible to individualize surgical tactics in each specific case and select a pathogenetic justified method of reoperation.

A comprehensive examination of patients with REP, as well as the development of objective criteria for choosing the method and volume of surgery for REP, made it

possible to perform surgical interventions of various types. Among 44 (52.4%) resection techniques, economical atypical liver resections were performed in 24 cases, and in 13 (15.5%) anatomical liver resections; in 7 (8.3%) cases, total pericystectomy was performed. In our studies, we used an improved technique of atypical economical liver resection, which adhered to the anatomical principles of surgery. In 24 observations, when performing combined (n=6) and palliative interventions (n=18) for REP in order to prevent repeated relapses during surgery, the principles of aparasiticity and antiparasiticity were adhered to, with mandatory video endoscopy of residual cavities and intraoperative ultrasound.

Among the intraoperative complications of various types of liver resection, intraoperative bleeding from the stump of the resected liver is dangerous. In some cases, due to disruption of the mechanisms of local hemostasis and the development of transient portal hypertension during surgery, some uncontrolled bleeding develops.

In recent years, the drug hestop has been effectively used to achieve local hemostasis from medium-sized small blood vessels.

To prevent the risk of bleeding from the stump of the resected liver, we have proposed drug control of bleeding. According to the proposed method, at the final stage of the operation, the liver stump is covered with hemostatic powder Hemostop and held tightly for 5-7 minutes. As a result, the liver stump is covered with a dense filmy base, and, thereby, hemostasis is achieved. The proposed method for the prevention and treatment of bleeding from the stump of the resected liver was effectively used in 7 patients with good immediate and long-term results.

Biliary postoperative complications of liver resection are accompanied by bile and bleeding. The cause of the development of bile and bleeding is transient post-resection bile leakage and portal hypertension. To prevent post-resection bile and bleeding, the clinic has developed a method of drug therapy. The developed methodology is that after completion of the operation on the operating table, subcutaneous administration of the neuropeptide Sandostatin is started, 1.0 ml 2 times for 4-5 days. Previously, according to our previous studies, as well as literature data, the effect of sandostatin on the portal system and bile production was proven. The proposed technique was effectively used in 8 cases of patients after liver resection.

For focal liver diseases, as well as REP, the most radical treatment method is liver resection. Often, after performing liver resections of varying volume and nature, postoperative bile leakage is observed with the development of postoperative biliary

peritonitis. This is primarily due to the fact that after liver resection, the bile ducts collapse. Subsequently, due to post-resection biliary hypertension, bile leakage is observed through the damaged segmental bile ducts. Timely intraoperative diagnosis of bile duct tightness allows for additional suturing and prevention of postoperative complications. To determine the tightness of the stump of the resected liver, the clinic has developed a method for identifying incompetence of the segmental bile ducts. The developed method for determining the tightness of the liver stump is as follows. To control the tightness of the liver stump, a soft clamp is placed on the left hepatic duct, the distal part of the common bile duct is pressed with the hand, and 20-30 ml of fuchsin-stained saline is injected through the cystic duct. The release of colored saline solution from the liver stump gives grounds to additionally apply sealing sutures, and thereby prevent the development of postoperative bile leakage. The technique was effectively used in 6 cases during liver resection.

Among the early postoperative complications of liver resection with REP, the most severe and dangerous is bile leakage. The cut segmental bile ducts that were not recognized during the operation are subsequently complicated by significant bile leakage with the development of postoperative biliary peritonitis due to transient biliary hypertension caused by the removal of significant areas of liver tissue or the presence of an obstacle to the free passage of bile in the intestine (inflammatory edema).

To prevent post-resection transient biliary hypertension, the clinic has developed a method of external drainage of the bile ducts. According to the proposed method, after liver resection, a polyvinyl chloride catheter is inserted through the common bile duct into the remaining lobe of the liver to decompress the bile ducts and relieve bile hypertension. Next, the long end of the probe is brought out through a separate puncture. Decompression of the remaining lobe of the liver and bile ducts is carried out within 4-5 days, after which the drainage from the bile ducts is removed. Four patients were operated on using the proposed method.

After prescribing albendazole, various side effects may occur, which may be accompanied by dyspeptic symptoms, jaundice, and an increase in the level of cytolytic enzymes in the blood serum. To reduce the incidence of side effects and improve liver function when albendazole was prescribed, the drug Heptral 400 mg IV for 10 days and Reamberin 400 ml per day every other day for 10 days were added to it. Repeated courses of chemotherapy with albendazole were carried out after ultrasound, CT and MRI (as indicated) every 6 months for 4-5 years.

Thus, there is no doubt that the frequency of local relapse of echinococcosis is directly dependent on the complete removal of the parasite's membrane and the elimination of the residual cavity. Repeated operations should be performed in specialized departments on a radical scale. Radical operations for REP, as a rule, are performed in difficult topographic-anatomical conditions of adhesive and infiltrative-inflammatory processes and often against the background of purulent-septic complications that aggravate the condition of patients, which naturally leads to an increase in intraoperative blood loss and specific biliary complications.

Conclusions: Developed and improved methods of drug and surgical prevention of intra- and postoperative bleeding and bile leakage can significantly reduce the incidence of biliary complications and bleeding after resection and conditionally radical interventions for recurrent echinococcosis.

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