

WAYS TO IMPROVE THE RESULTS OF SURGICAL TREATMENT OF HEPATIC ECHINOCOCCOSIS AND PREVENTION OF RECURRENCE



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ЖИГАР ЭХИНОКОККОЗИНИ ЖАРРОҲЛИК ДАВО НАТИЖАЛАРИНИ ЯХШИЛАШ ЙЎЛЛАРИ ВА ҚАЙТАЛАНИШНИНГ ОЛДИНИ ОЛИШ

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ПУТИ УЛУЧШЕНИЕ РЕЗУЛЬТАТОВ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ЭХИНОКОККОЗА ПЕЧЕНИ И ПРОФИЛАКТИКА РЕЦИДИВА

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Резюме. Клиник тадқиқотлар жигар эхинококкози билан касалланган 371 беморни ташиқил этди. Жигар эхинококкозини жарроҳлик даволаш тактикасини оптималлаштириши, жарроҳлик кесимини танлаш, қолдиқ бўшлиқни қайта ишлаш ва бартараф қилиш усулини, шунингдек профилактик кимётерапия курсини тузатишни ҳисобга олган ҳолда, операциядан кейинги энг яқин асоратлар частотасини 12,5% дан 4,3% гача камайтириши ва касалликнинг қайталанишини камайтириши орқали кўрсатиладиган ёрдам сифатини оширишга имкон берди. Сурункали диффуз жигар патологияси билан оғриган беморларда жигар эхинококкозининг такрорланишининг олдини олиш учун албендазол дозасини клиник жиҳатдан тузатиш ноҳужя реакцияларни ривожланиш эҳтимолини 52,7% дан 18,3% гача ва шунга мос равишда жигар аминотрансферазалари кўрсаткичларини: таққослаш гуруҳидаги АЛТ $1,14 \pm 0,11$ дан $0,62 \pm 0,05$ ммол/л гача. асосий гуруҳда ва АСТ билан $0,72 \pm 0,07$ дан $0,52 \pm 0,04$ ммол/л гача камайтиришга имкон берди.

Калит сўзлар: жигар эхинококкози, жарроҳлик даволаш, кимётерапия.

Abstract. The clinical study included 371 patients with liver echinococcosis. Optimization of the tactics of surgical treatment of liver echinococcosis, taking into account the choice of access, method of treatment and elimination of the residual cavity, as well as correction of the course of prophylactic chemotherapy, improved the quality of care by reducing the frequency of immediate postoperative complications from 12.5% to 4.3% and the recurrence of the disease from 11.9% to 2.6%. It is clinically justified to correct the dose of albendazole for the prevention of recurrence of liver echinococcosis in patients with concomitant chronic diffuse liver pathology, which made it possible to reduce the likelihood of adverse reactions from 52.7% to 18.3%, and, accordingly, indicators of hepatic aminotransferases: ALT in the comparison group from 1.14 ± 0.11 to 0.62 ± 0.05 mmol/l in the main group and AST from 0.72 ± 0.07 to 0.52 ± 0.04 mmol/l.

Key words: liver echinococcosis, surgical treatment, chemotherapy.

Introduction. According to the World Health Organization, "more than 1 million people are affected by echinococcosis in the world, while among various organs and tissues in 44-84% of cases the process is localized in the liver" [5, 6, 7]. Due to the absence of a downward trend in the number of patients and the existence of endemic regions where the incidence rate varies from 1.2 to 9.0 per 100,000 population, this parasitic disease continues to be a serious medical and social problem [4]. At the present stage, the diagnosis of liver echinococcosis (EP) does not present significant difficulties, largely due to the advent of

noninvasive imaging methods, the informative value of which reaches 95-100% [1]. However, the lack of alertness towards echinococcosis contributes to late diagnosis, and, consequently, an increase in complicated forms of the disease [2, 3]. "However, a fairly high frequency of postoperative complications (34-50%) and numerous cases of postoperative relapses of the disease

Material and methods. The clinical study consisted of 371 patients with EP. Out of 371 patients in 2005-2008, 145 (39.1%) were operated on, who made up the 1st subgroup of the comparison group. The 2nd subgroup of the

the comparison group included 111 (29.9%) patients operated on in 2009-2012, in whom 80-100% glycerin at room temperature was used to treat the residual cavity. The main group included 115 (31.0%) patients operated on in 2013-2017, in whom the residual cavity with uncomplicated echinococcosis was treated with hot glycerin heated to 60°C, and with complicated - with hot glycerin in combination with low-frequency ultrasound

Results and discussion. The absolute majority of the performed echinococcectomies (99.8%) were of an organ-preserving nature, and only 1 (0.2%) patient had to resort to resection of the left lobe of the liver. In suitable situations, the opportunity to perform an ideal echinococcatomy was not missed – 2 (0.3%) parasitic cysts were removed by peeling the entire chitinous shell. In our observations, 412 (77.6%) residual cavities were treated according to the type of closed echinococcectomy and only 116 (21.8%) fibrous capsules were sutured with a semi-closed drainage method.

Chemotherapy with albendazole was started no later than 1 month after surgical treatment. In the comparison group, postoperative chemotherapy was performed in 112 (43.8%) patients according to the traditional scheme. Against the background of treatment, an increase in the average concentration of AST and ALT after the first course of chemotherapy was noted, respectively, to 0.55 ± 0.05 and 0.88 ± 0.08 mmol/l. Parenchymal jaundice was observed in 3 (2.7%) patients, dyspeptic symptoms were observed in 41 (36.6%) patients and reversible alopecia developed in 2 (1.8%) patients, while in 16 (14.3%) cases it was necessary to cancel preventive treatment. At the same time, it should be emphasized that an increase in transaminases was typical for patients suffering from or previously suffering from liver diseases.

Of 112 patients, 54 (48.2%) had concomitant chronic diffuse liver pathology. Taking into account this fact, the dose of albendazole was adjusted in the main group, taking into account the initial functional state of the liver. In cirrhosis of the liver, as well as in cases with an initial (before surgery) increase in liver enzymes, albendazole was used at a dose of 5 mg / kg / day. In turn, with the development of changes in blood biochemical parameters or clinical manifestations of a toxic effect against the background of a standard dose of albendazole, patients also changed the treatment regimen to 5 mg / kg / day. In the main group, chronic diffuse liver diseases were detected in 51.3% of cases. Initially, reduced doses of albendazole were used in 11 (9.6%) patients, and a reduction in the traditional dose against the background of biochemical changes was required in another 21 (18.3%) patients. In general, 32 (27.8%) patients of the main group received chemotherapy according to the proposed scheme. Dose adjustment in patients with adverse events contributed to the normalization of biochemical parameters and reduced the risk of toxic manifestations during chemotherapy. Studies have shown that the probability of adverse reactions against the background of chemotherapy with albendazole according to clinical and laboratory parameters was 52.7% (59 patients in the comparison group), due to the toxic effect of the drug and the presence of concomitant chronic diffuse liver pathology, while treatment was noted in 14.3%, in turn, the possibility of dose adjustment allowed to reduce This value is up to 18.3% (21 patients in the main group)

and, accordingly, provide a full course of antiparasitic therapy (criterion $\chi^2 = 26.703$; $p < 0.001$). Monitoring of hepatic aminotransferases also showed a significant difference between these indicators in the comparison groups. Thus, the ALT level in the comparison group was 0.88 ± 0.08 mmol/l versus 0.51 ± 0.04 mmol/l in the main group ($p < 0.001$), the AST indicators did not differ significantly, while among patients with concomitant chronic liver pathology, the ALT value was 1.14 ± 0.11 versus 0.62 ± 0.05 mmol/l ($p < 0.001$) and AST – 0.72 ± 0.07 versus 0.52 ± 0.04 mmol/l ($p < 0.05$). Of the 236 patients examined in the long term, recurrence of echinococcosis was noted in 21 (8.9%) patients, while in the group of patients operated in 2005-2008, this indicator reached 16.3%, which It was due to the lack of preventive chemotherapy.

An analysis of the world literature shows that currently there are no precise criteria to classify newly identified parasitic cysts as invasive, residual, implantation or metastatic. In order to approximate the nature of newly identified cysts in the long-term period, we studied the relationship between the localization of recurrent and initially removed cysts. Those recurrent cysts that developed in the area of the previous intervention can be conditionally associated with the shortcomings of the aparasitic and antiparasitic techniques of primary intervention. If a recurrence occurs in another lobe of the operated organ or in another organ, then such cysts are most likely to progress from microscopic larvocysts. Due to the use of disease prevention measures, the recurrence rate of the disease was reduced in the 2nd subgroup of the comparison group to 5.9%, and in the main group to 2.6%. Thus, the developed method of preventive chemotherapy allowed to improve the quality of care by reducing the frequency of immediate postoperative complications from 12.5% (32 patients in the comparison group) to 4.3% (5 patients in the main group) (criterion $\chi^2 = 4.954$; $Df=1$; $p=0.027$) and recurrence of the disease from 11.9% (19 patients in the comparison group) up to 2.6% (in 2 patients in the main group) (criterion $\chi^2 = 4.692$; $Df=1$; $p=0.031$)

Conclusions. Experimental studies on 32 sheep showed that in areas of the liver remote from the primary echinococcal cyst, the presence of microscopically identifiable germinal micro-cysts was revealed, which can lead to the development of a relapse of the disease after the removal of large cysts. Stimulation of the proliferative-productive cellular reaction around the germ cyst of the parasite with a depressing effect when using albendazole at a dose of 20 mg / kg occurs within 2 weeks, whereas at a dose of 10-15 and 5-7 mg / kg, the effect occurred by 3-4 weeks of follow-up, which allows you to adjust the recommended dose of albendazole (10-12 mg / kg) in cases of possible the risk of developing toxic reactions (diffuse liver diseases), taking into account the prolongation of the course of treatment. Clinically justified dose adjustment of albendazole for the prevention of recurrence of liver echinococcosis in patients with concomitant chronic diffuse liver pathology, which reduced the likelihood of adverse reactions from 52.7% to 18.3% ($\chi^2 = 26.703$; $p < 0.001$), and, accordingly, the indicators of hepatic aminotransferases: ALT in the comparison group from 1.14 ± 0.11 to 0.62 ± 0.05 mmol/l ($p < 0.001$) in the main group and AST from 0.72 ± 0.07 to 0.52 ± 0.04 mmol/l ($p < 0.05$).

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ПУТИ УЛУЧШЕНИЕ РЕЗУЛЬТАТОВ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ЭХИНОКОККОЗА ПЕЧЕНИ И ПРОФИЛАКТИКА РЕЦИДИВА

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Резюме. Клиническое исследование составили 371 больных с эхинококкозом печени. Оптимизация тактики хирургического лечения эхинококкоза печени, с учетом выбора доступа, способа обработки и ликвидации остаточной полости, а также коррекции курса профилактической химиотерапии позволила улучшить качество оказываемой помощи за счет снижения частоты ближайших послеоперационных осложнений с 12,5% до 4,3% и рецидива заболевания с 11,9% до 2,6%. Клинически обоснована коррекция дозы альбендазола для профилактики рецидива эхинококкоза печени у пациентов с сопутствующей хронической диффузной патологией печени позволившая снизить вероятность развития побочных реакций с 52,7% до 18,3%, и соответственно показателей печеночных аминотрансфераз: АЛТ в группе сравнения с $1,14 \pm 0,11$ до $0,62 \pm 0,05$ ммоль/л в основной группе и АСТ с $0,72 \pm 0,07$ до $0,52 \pm 0,04$ ммоль/л.

Ключевые слова: эхинококкоз печени, хирургическое лечение, химиотерапия.