DIAGNOSIS AND SURGICAL TREATMENT OF ECHINOCOCCAL CYST OF THE LIVER

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Abstract: The World Health Organization has defined obesity and overweight as "abnormal or excessive accumulation of fat that can negatively affect health" and declared this pathology a global epidemic. To classify obesity in many countries, including Russia, the body mass index (BMI) is used, calculated by the formula: weight (kg) / height (m2). At the same time, BMI ≥ 25 indicates overweight, and BMI ≥ 30 indicates obesity.Many foreign researchers attribute overweight and obesity to multifactorial, complex, multigenic disorders that are closely related to the characteristics of the psychosocial and cultural environment. Material and methods. Patient H., 54 years old, was examined. Preoperative examination revealed a picture of morbid obesity of alimentary constitutional genesis, abdominal type, complicated by a giant fat fold of the anterior abdominal wall and secondary lymphedema. An atypical middle abdominoplasty with a reconstructive component of the anterior abdominal wall was performed. Results. Successful removal of 60 kg fat "apron". Findings. Based on our clinical experience, we can say that patients with advanced morbid obesity respond positively to complex treatment with minimal complications in the postoperative period. Removal of the main adipose tissue collector has a positive effect on further weight loss in combination with conservative therapy.

Keywords: hepatocytes, zoonotic foci, echinococcus, liver.

ДИАГНОСТИКА И ХИРУРГИЧЕСКОЕ ЛЕЧЕНИЕ ЭХИНОКОККОВОЙ КИСТЫ ПЕЧЕНИ

Аннотация: Всемирная организация здравоохранения определила ожирение и избыточный вес как «ненормальное или чрезмерное накопление жира, которое может отрицательно повлиять на здоровье» и объявила эту патологию глобальной эпидемией. Для классификации ожирения во многих странах, в том числе и в России, используется индекс массы тела (ИМТ), рассчитываемый по формуле: вес (кг)/рост (м2). При этом ИМТ ≥ 25 указывает на избыточную массу тела, а ИМТ ≥ 30 – на ожирение. Многие зарубежные исследователи относят избыточную массу тела и ожирение к многофакторным, сложным, мультигенным нарушениям, тесно связанным с особенностями психосоциальной и культурной среды. Материал и методы. Обследован больной Х., 54 года. При предоперационном обследовании выявлена картина морбидного ожирения алиментарно-конституционального генеза, абдоминального типа, осложненного гигантской жировой складкой передней брюшной стенки и вторичной лимфедемой. Выполнена атипичная срединная абдоминопластика с реконструктивным компонентом передней брюшной стенки. Полученные результаты. Успешное удаление 60 кг жирового «фартука». Выводы. На основании нашего клинического опыта можно сказать, что пациенты с выраженным морбидным ожирением положительно реагируют на комплексное лечение с минимальными осложнениями в послеоперационном периоде. Удаление основного коллектора жировой

ткани положительно влияет на дальнейшее снижение массы тела в сочетании с консервативной терапией.

Ключевые слова: гепатоциты, зоонозные очаги, эхинококк, печень.

INTRODUCTION

The use of hormonal drugs (estrogens, oral contraceptives) is also considered as a cause of liver cysts. The prevailing theory in modern medical science is one that explains the occurrence of liver cysts from aberrant intralobular and interlobular bile ducts, which during embryonic development are not included in the biliary tract system. Secretion from the epithelium of these closed cavities leads to the accumulation of fluid and their transformation into a liver cyst. This hypothesis is confirmed by the fact that the cyst secretion does not contain bile, and the formation cavity does not communicate with functioning bile ducts. With clinical manifestations of liver cysts, patients note a feeling of heaviness or pain in the right hypochondrium and epigastric region, abdominal discomfort after eating, heartburn, belching, loss of appetite, nausea. Non-parasitic liver cysts, as a rule, develop at the age of 30-50 years, while liver echinococcosis occurs at any age.

The purpose of the study is to improve the results of diagnosis and surgical treatment of patients with parasitic and non-parasitic liver cysts based on the use of diapeutic methods.

MATERIALS AND METHODS OF RESEARCH

The study is based on a clinical and laboratory examination of 117 patients with cystic liver formations who underwent diapeutic and surgical interventions in the surgical department of the multidisciplinary clinic of Samarkand State Medical University for the period from 2016 to 2023. All procedures for patients were performed as planned. Depending on the choice of treatment tactics, the patients were divided into two groups. The first group, the comparison group, consisted of 65 patients whose parasitic and non-parasitic cysts were removed by laparoscopic and open methods. The second group, the main group, consisted of 52 patients who underwent percutaneous transhepatic cystectomy.

Patients with solitary and multiple cysts were combined into one group due to their common etiology, which facilitated the processing of the material and their analysis.

Our study included patients with parasitic cysts in the modification of E. Veterinorum, i.e. in the lumen of the cyst there were 1 or 2 chitinous membranes without daughter blisters. Also in our study there were no patients with recurrent parasitic cysts.

The size of cysts in the liver varied from 2 to 20 cm in diameter and contained from several milliliters to 1 liter of fluid; the bulk (67.5%) were patients with cysts from 5 to 10 cm. The size of echinococcal cysts varied up to 10 cm in diameter. By nature, in 82 cases the liquid was clear or colorless, in 29 cases it was light yellow, brown or cloudy, in 6 cases it was purulent (Table 2.3).

Based on the number of cysts, patients are classified according to the A.A. classification. Shalimova (1993). According to this classification, single or solitary cysts were identified in 80 (68.4%) patients, multiple cysts, i.e. 2 or 3 cysts were detected in 22 (18.8%) patients. Polycystic liver disease (non-parasitic cysts) was noted in 15 (12.8%) patients only in the comparison group.

RESULTS AND DISCUSSION OF THE WORK

The fundamental point of the problem being developed was the sharp limitation of indications for open interventions through laparotomic access due to their high traumatic nature,

unsatisfactory immediate and long-term results, as well as due to the rapid development of medical imaging methods and the introduction of minimally invasive technologies into surgical practice.

When determining the indications for surgical treatment, it was assumed that patients with true uncomplicated liver cysts measuring up to 5 cm in diameter were subject to dynamic observation. According to the literature, such cysts do not cause atrophic changes in the liver parenchyma surrounding the cyst and do not affect the functional state of the organ. The use of ultrasonography in color Doppler mode helped to verify true uncomplicated cysts.

The complete absence of blood flow in the thickness of the cyst wall was an important differential diagnostic sign in relation to complicated cysts and other focal liver diseases. In some cases, when performing color Doppler ultrasound, weakly expressed signals were noted both in the area of the cyst walls and in its cavity, however, with true liver cysts, these signals were artifacts and quickly disappeared when the study parameters were changed.

The main complaints were pain, discomfort in the right hypochondrium or epigastrium, and an increase in the size of the abdomen. In patients with polycystic disease, the predominant complaints were heaviness, pain, a feeling of fullness, and in the area of the right hypochondrium and epigastrium.

The main puncture method of treatment in the studied patients was percutaneous puncture and sclerosis of liver cysts, which was performed in 31 (79.5%) patients. We used 96% alcohol as a sclerosing agent, introducing it into the cyst cavity in a volume of 40-45% of the amount of evacuated fluid. For large cysts, instillation of 40-60 ml of alcohol was performed to prevent intoxication. The exposure lasted 5 minutes, while the patient was asked to change his body position several times to increase the contact of the inner lining of the cyst with the sclerosant, after which a full evacuation of the contents of the cyst was repeated, followed by removal of the needle. It should be noted that most authors also suggest using 96% alcohol in combination with iodine as a sclerosant.

CONCLUSION

Analysis of percutaneous puncture methods of surgical operations has revealed wide possibilities for treatment and diagnostic tactics for managing patients with liver cysts, which allows, in most cases, to perform surgical intervention in conditions more favorable for the patient. Patients with non-parasitic solitary cysts or a dominant cyst in polycystic disease up to 5 cm in diameter require dynamic monitoring. The indications for puncture cystectomies are non-parasitic solitary and multiple liver cysts measuring 5 cm or more. We consider the localization of cysts on the posterior surface of the liver, as well as intraparenchymal location, to be contraindications. Indications for puncture echinococcectomy are solitary and multiple cysts with a diameter of no more than 7 cm, located in acceptable zones, at stage CE1 according to the WHO classification (2003). Contraindications to the use of this technique are disseminated and complicated forms of echinococcosis.

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