

ABSTRACT

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Liver Abscess. Choice of Surgical TreatmentProfessor **Boyko V. V.**^{1,2}, Professor **Lykhman V. M.**¹,
Myroshnychenko D. O.²¹ State Institution "V. T. Zaitsev Institute of General and Emergency Surgery of National Academy of Medical Sciences of Ukraine", Ukraine² Kharkiv National Medical University, Ukraine**Background:**

Liver abscesses remain one of the most difficult complications in liver surgery. For choose the right treatment, you are need to know what the true cause of the abscess is. In the presence of significant pathology of the bile ducts or inefficiency of percutaneous interventions, surgical treatment remains an alternative, however, various methods of intraperitoneal and extraperitoneal accesses are quite traumatic and often not adequate, especially with multiple abscesses, as well as with the development of sepsis.

Methods:

For the period 2015-2020 years at State Institution "V. T. Zaitsev Institute of General and Emergency Surgery of National Academy of Medical Sciences of Ukraine", we have completed and interpreted 82 patients. Age of patients were 21 till 80 years. Draining the abscess of the impaired 95 times, in 82 times with 4 types: with ultrasound control – 45 (54.88%) patients, laparoscopic – 20 (24.4%), control with angiography – 2 (2.44%) and laparotomy – 15 (18.28%). In 7 cases were liver resection. The causes were: choledocholithiasis in 34 cases, stricture of choledochus in 26 cases, complications of acute pancreatitis in 16 cases, and other in 6 cases. In all patients we used ultrasound investigation, and CT only in multiple abscess.

Results:

Ultrasound investigation (sensitivity of a warehouse is 80-90%) can view the all stages: from first till to the final form of the capsule. Ultrasound drainage was performed by the following two methods: aspiration and drainage. The first puncture-aspiration method, which has shown its effectiveness in patients with abscess sizes up to 9 cm, without sequestrs, single-chamber and located in the ventral segments of the liver. The puncture-drainage method of treatment proved to be more effective, but it was accompanied by a long existence of residual purulent cavity, and there was a leakage of abscess contents into the abdominal cavity (although none of them required additional surgical manipulations). A positive effect was noted after the first minimally invasive intervention occurred in 76 (92.68%) patients, others required reinstallation (or replacement) of drainage under ultrasound control, laparoscopic or laparotomy access. The use of laparoscopic treatment proved to be the best, so in addition to drainage of the abscess, a safety drainage was installed in the abdominal cavity. This allows you

to perform drainage of large abscesses.

Analyzing the variety of approaches and methods, it is possible to formulate the position that ultrasound controlled drainage can be the method of choice in the treatment of most liver abscesses and should be used in the following cases: 1. An abscess of any size, but not exceeding the size of one lobe; 2. The presence of technical conditions for drainage under the control of ultrasound or laparoscopic; 3. Severe general condition of the patient, which does not allow to perform a more radical operation. Therefore, the use of mini-invasive puncture and drainage techniques may be the first stage of treatment. Its purpose in case of impossibility of full treatment – to prepare the patient for more traumatic, but effective operation.

The disadvantage of laparoscopic and open interventions is the great trauma, so it should be considered a reserve operation and the indications should be limited to the following points: 1. An abscess of large size, occupying a whole fraction or more; 2. Multichamber abscesses with many bridges and sequestrs; 3. Several single, incompatible and locally located abscesses of the posterior segments of the liver.

Conclusions:

1. The main task in the treatment of purulent diseases of the hepatobiliary system is to decompress and rehabilitate the biliary tract, followed by antibacterial therapy, taking into account the sensitivity.
2. In the treatment of liver abscesses it is necessary to use more actively the methods of ultrasound controlled drainage, as a less traumatic, safer and more effective intervention with more opportunities to control the postoperative period.
3. Laparoscopic and open interventions are indicated for multiple and giant multiple abscesses.

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