



## RESULTS OF LAPAROSCOPIC SIMULTANEOUS OPERATIONS FOR CORRECTION OF COMBINED SURGICAL PATHOLOGIES IN PATIENTS OF ADOLESCENCE AND YOUNG AGE

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**Abstract:** Currently, in healthcare around the world, including Uzbekistan, the gold standard for surgical treatment of combined diseases of the abdominal organ proved to be simultaneous operations using endovideosurgical technologies. The purpose of this scientific work was to evaluate the effectiveness of simultaneous endovideosurgical operations in patients with combined diseases of the abdominal organs in adolescence and young adulthood.

**Key words:** girls and boys of adolescence and young age, cholelithiasis.

**Introduction.** According to a number of authors, due to the use of modern high-tech means, as well as scientific progress in medicine, improvement of diagnostic methods in recent years, the number of patients of adolescent and teenage age, whose examination reveals several diseases that require surgical correction is increasing [4]

Nowadays in medicine the gold standard of surgical treatment of various diseases of abdominal cavity organs is the use of endovideosurgical technology[1].

The hereditary-determined disease of liver and biliary tract leads to biliary stone disease in youth and adolescence. Violation of the processes of bile formation and biliary excretion, accompanied by chronic inflammation, the natural outcome of which is

sclerosis, gallbladder dystrophy and stone formation [3].

Stagnation of the digestive and biliary tract and disturbance of concentration, as well as change in the specific weight of bile, dietary disorders, as well as consumption of low-quality products are the main causes in the development of biliary cambial disease. These factors are the most significant in adolescence and youth [2].

According to numerous foreign and domestic authors in recent years there is an increase in the number of patients with combined diseases of abdominal cavity organs and the frequency of their combination reaches from 3.2 to 65%[5]. According to WHO published data, 25-30% of adult patients have one or two comorbidities requiring surgical correction[8]. However, simultaneous surgical interventions

in these patients are performed only in 1.5-6% of cases, and in adolescence and young adulthood there is no static data at all.

The aim of the work: to evaluate the efficiency of application of simultaneous endovideosurgical operations in patients with combined diseases of abdominal cavity organs in adolescence and adolescence. This work is based on a prospective analysis of 48 patients with combined diseases requiring surgical treatment. Among the patients who underwent laparoscopic simultaneous surgery girls were 25 (58,3%) and boys 20 (41,6%), age  $\bar{x}$  ranged from 15 to 20 years.

All patients underwent anamnesis and physical examination, laboratory and instrumental investigations, radiation diagnostics, and consultation of specialized specialists.

Surgical intervention was performed in endovideosurgical operating room using endovideosurgical rack produced by "Karl-Storz" (Germany), under intravenous anesthesia in conditions of artificial lung ventilation.

Chronic calculous cholecystitis was the main surgical diagnosis in 48 patients. In all patients laparoscopic cholecystectomy (LCE) was performed as the first stage, and then simultaneous surgery was performed.

In 9 patients diagnosed with CCH there was a concomitant hepatic solitary cyst, which was located mainly superficially in V and VII segments of the liver. The first stage patients underwent LCE in the following way: the patient's position was on the back. The operating table was tilted to the left by 15-20 degrees and the head end was raised by 20 degrees. Then pneumoperitoneum was applied and trocars were inserted into the abdominal cavity: 1-parumbilically (10 mm), 2-in the epigastrium (10 mm), 3-in the midclavicular line 2 cm below the rib arch on the right (5 mm). Laparoscopic cholecystectomy was performed according to the generally accepted technique (Puchkov K.V. 2005 ). The time of LCE did not exceed  $20 \pm 10$  min. Then laparoscopic resection of solitary liver cyst was

performed as the second stage. At first the cyst was punctured and the contents was aspirated, the cyst cavity was washed through the puncture needle with warm solution of furacilin. Then the capsule was precisely removed, and if it was impossible, 2/3 of the cyst wall was excised.

Thoracoport placement at laparoscopic echinococectomy from the liver in 19 patients was performed as at LCE according to the generally accepted technique, but in the right subcostal region we placed a 20 mm thoracoport in the place of 5 mm. After delimitation of the echinococcal cyst with a gauze swab wet with 76-80% alcohol, we performed puncture of the echinococcal cyst with aspiration of the contents. Through this needle 76% alcohol was injected into the cavity and then washed with hot solution of furacillin (78-80o) with exposure of 5-8 min. Then, the fibrous capsule was dissected, the chitinous shell was removed, and it was extracted from the abdominal cavity in a special container. The residual cavity was treated with 76% alcohol, then with warm furacillin solution (78-80o). In 17 patients after that the residual cavity was tamponed with a large omentum. In two patients, due to the impossibility to tamponade the residual cavity with the omentum, a "mini" laparotomy access in the projection of the residual cavity was used. Through the "mini" laparotomy access the residual cavity was liquidated by the "capitainege" method. The operation was completed by draining the subhepatic region with a silicone tube through a 20 mm thoracoport placed in the right subcostal region.

In 12 patients with umbilical hernia, after LCE according to the conventional technique, the umbilical ring plasty was performed in 10 cases according to the Meyo method and in 2 cases with the help of propylene mesh.

In 8 patients with inguinal hernias the inguinal ring plasty was performed using propylene mesh and 2 composite meshes.

**Results of the study and their discussion:**  
From all 48 patients 40 patients were operated

in planned order. The diagnosis of CCH with concomitant pathology was established during examination in the preoperative period, and in 8 patients the concomitant pathology was an operative finding. The indication for emergency CRC in 8 patients was acute pain in the right subcostal area with signs of obturation calculous cholecystitis.

All operated 48 patients did not need narcotic analgesics in the postoperative period, they became active by the end of the day and felt satisfactory.

In 45 patients drainage tubes were removed a day after control ultrasound of the abdominal cavity. In 2 patients who underwent emergency SLX+removal of echinococcal cyst of the liver there was bile discharge from the drainage tube in the amount of 120-160 ml per day, which stopped independently on the 6-7th day after the operation.

On the control ultrasound of the abdominal cavity of these patients due to the absence of residual cavity the drainage tubes were removed on the 8-10 day after the operation.

In all operated patients the restoration of intestinal peristalsis and gas discharge occurred on the 2nd day after surgery.

The duration of LCE in all patients was approximately the same: the average duration of LCE + removal of solitary hepatic cyst  $50 \pm 10$  min; LCE + removal of echinococcal cyst of the liver  $65 \pm 10$  min. LCE + herniorrhaphy (umbilical hernia)  $55 \pm 10$  min and LCE + herniorrhaphy (inguinal hernia)  $60 \pm 10$  min.

The average bed-day of the patient's stay in hospital was: in patients who underwent LCE + removal of solitary liver cyst  $4,5 \pm 0,5$  days; LCE + removal of echinococcal liver cyst  $4,8 \pm 1$  days; LCE + herniorrhaphy (umbilical hernia) -  $4,6 \pm 0,5$  days; LCE + herniorrhaphy (inguinal hernia) -  $4,6 \pm 0,5$  days.

In the postoperative period, all patients were activated by the end of the first day, they did not need narcotic analgesics. In patients

drainage tubes were removed a day after control ultrasound of the abdominal cavity.

In all patients postoperative wounds healed by primary tension. Bile discharge up to 60-80 ml from the tube installed in the residual cavity was observed in one patient. The operations lasted in average  $60 \pm 10$  minutes, the average bed-day of the patient in hospital was  $4,6 \pm 05$  days, the rehabilitation period was 16-18 days on the average.

It should be noted that in two patients after laparoscopic echinococectomy simultaneous LCE with drainage of residual cavity there was bile secretion from the drainage tube up to 120-130 ml per day. In these patients bile secretion stopped on the 7th-9th day independently. Severe condition of patients in postoperative period was not observed, we did not observe any lethal outcomes.

Due to the impossibility of laparoscopic correction of concomitant combined surgical diseases of abdominal cavity organs, 3 patients underwent combined "mini" laparotomy access.

The combined technique with the use of "mini" access surgery is a promising one, which greatly reduces the duration of surgery, thus the postoperative period in patients is favorable.

Thus, laparoscopic simultaneous operations for correction of combined surgical diseases of abdominal cavity organs and anterior abdominal wall is the most optimal and justified intervention, which at one anesthesia eliminates combined surgical pathologies, reduces the time of hospitalization and rehabilitation. After simultaneous laparoscopic surgeries patients feel fully satisfactory.

#### Conclusions:

1. Simultaneous laparoscopic surgeries are the most optimal in adolescent and teenage patients with combined surgical diseases of abdominal cavity organs.
2. For liquidation of residual cavity after laparoscopic echinococectomy from the liver

the method of choice is tamponade with the greater omentum.

3. The advantage of simultaneous laparoscopic operations is undoubtedly the economic effect. The cosmetic and aesthetic effect of the operation for patients plays a great role.

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