Medical and surgical activities carried out in simultaneous pathology (combination of gynecological and surgical pathology) in women

Abstract: Numerous studies in recent years indicate not only the wide dissemination of simultaneous abdominal diseases, but unsatisfactory results of treatment of these diseases. In addition, a one-time surgical treatment of patients with two or three abdominal diseases is complex and not completely solved the problem.

Keywords: laparoscopic operation, simultaneous pathology, surgical pathology.

Background
Numerous studies in recent years indicate not only widely distributing simultaneous diseases of the abdominal cavity, but unsatisfactory results of their treatment. In addition, the cross-sectional operative treatment of patients with two or three abdominal disease is a complex and unsolved problem [1; 2].

The ubiquity of endoscopic surgery has provided a unique opportunity to redefine the boundaries of two disciplines — gynecology and surgery as operative laparoscopy not only equivalent, but preferred classical treatment [5; 6].

The literary data give rare information on this topic, although in practice, many gynecologists and surgeons point out the need for such operations.

In this context, the aim of our work was the improvement of the methods of combined surgical treatment of diseases of the pelvic and abdominal cavity.

Materials and methods
The research is based on analysis of results of surgical treatment of 200 patients with different concomitant diseases of the abdominal cavity, which was carried out a simultaneous surgery.

Patients were divided into two main groups: the first 107 patients who underwent laparoscopic and traditional simultaneous operations (study group), the second group — 93 patients with conventional surgery (control group), to which was performed one isolated operation (fig. 1).

It was done a comparison of surgical approaches during simultaneous operations.

The average age in the study group was 38.6 ± 6.6, while in the control group, 41.3 ± 5.9 years. It should be noted that all the patients were in the most active working age.

In the study group of 107 patients who underwent laparoscopic procedures performed simultaneous 47 (43.9 %) accounted for calculous cholecystitis — chronic calculous cholecystitis was 40 (85.1 %), acute in 7 (14.9 %). In chronic calculous cholecystitis with minilaparotomic access cholecystectomy was performed to 40 patients (37.4 %), with the full and partial prolapse of uterus performed transvaginal hysterectomy 20 (18.7 %). Laparoscopic simultaneous stage of surgery was hysteromyoma in 47 patients. In addition, the study group is characterized by performing a combination of traditional and minilaparotomic operations.

So, simultaneous traditional stage of operations to calculous cholecystitis was hysteromyoma of different localization in 40 women, also with transvaginal hysterectomy simultaneous stage was herniomy of umbilical hernia in 20 patients.

The control group (control) consisted of 93 patients with gynecological and surgical pathology, which were performed by a single operation (hysterectomy, ventroplastics, cholecystectomy) in benign diseases (hysteromyoma, endometriosis, prolapse of the vaginal walls, chronic cholecystitis or umbilical hernias).

All patients were examined and prepared for surgery on an outpatient basis. Clinical examination of patients included a general analysis of blood and urine tests, blood chemistry, ECG, chest X-ray, ultrasound of the pelvic organs, the liver and gallbladder. Ultrasound of the gallbladder and the liver was carried out to avoid stones in the gallbladder, cyst and other entities in the liver. Particular attention was paid to the degree of purity of the vagina, which must comply with I–II degree.

Results and discussion
For 2010–2015y was performed $120 laparoscopic procedures, including simultaneous 107 (2.1 %) (Fig. 2).

![Fig. 2. Ratio of simultaneous operations to total laparoscopic surgery](image)

Table 1. – The combination of the operations in the main group

<table>
<thead>
<tr>
<th>Volume of operation</th>
<th>Number of patients</th>
<th>%</th>
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<tbody>
<tr>
<td>Laparoscopic cholecystectomy + laparoscopic hysterectomy</td>
<td>47</td>
<td>43.9</td>
</tr>
<tr>
<td>Minilaparotomic cholecystectomy + laparotomic hysterectomy</td>
<td>40</td>
<td>37.4</td>
</tr>
<tr>
<td>Transvaginal hysterectomy + Umbilical herniomy</td>
<td>20</td>
<td>18.7</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100</td>
</tr>
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</table>
In the control group, all patients were carried out only isolated operations: hysterectomy — 33 (42.3 %) patients, transvaginal hysterectomy — 21 (26.9 %), cholecystectomy — 11 (14.1 %) and ventroplastics — 13 (16.7 %), i.e. the same as those performed in the main group and also by classical techniques, but one operation in each patient.

Table 2. – Isolated operation in the control group

<table>
<thead>
<tr>
<th>Volume of operations</th>
<th>Number of patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hysterectomy</td>
<td>33</td>
<td>35.4</td>
</tr>
<tr>
<td>Transvaginal hysterectomy</td>
<td>21</td>
<td>22.5</td>
</tr>
<tr>
<td>Prolapse of the vaginal walls</td>
<td>15</td>
<td>16.3</td>
</tr>
<tr>
<td>Cholecystectomy</td>
<td>11</td>
<td>11.8</td>
</tr>
<tr>
<td>Ventroplasty</td>
<td>13</td>
<td>13.9</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
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The question of carrying out of simultaneous operations was solved by consultation with the participation of doctors, department heads, as well as with the participation of professors, associate professors and assistants of the Department of Surgery of Postgraduate Faculty of Pediatrics of SamMI.

Laparoscopic cholecystectomy + laparoscopic hysterectomy performed in 47 patients. Laparoscopic cholecystectomy was performed by the standard method: to enter a 10 mm. trocar through the navel, and then under the control of the laparoscope introduced two 5 mm. and one 10 mm. trocar in the right upper quadrant on the anterior axillary, clavicular and the middle of the median line. With monopolar coagulator allocated cystic duct and cystic artery, hemostasis is carried out using a bipolar coagulator and the drug was removed from the abdominal cavity through a midline incision.

After completing the cholecystectomy laparoscope unfolded to 180°, patient converted from Fowler position into the Trendelenburg position and performed the inspection of the pelvic organs. Laparoscopic hysterectomy with appendages about hysteromyoma in 47 cases was a simultaneous step to laparoscopic cholecystectomy. For such operations, the selection of patients was carried out carefully (uterine size of less than 12 weeks of pregnancy, a history of uncomplicated term delivery, no last transferred laparotomy and as a result the presence of severe adhesion process, the absence of an inflammatory process in the gall bladder and genital organs).

The fixation of the uterine cervix and cervical canal dilatation was performed with the help of the uterine manipulator of Clermont-Ferrand to ensure the position of the uterus in anteversio and certain provisions of the posterior fornix of the vagina between the sacro-uterine ligaments. Ureters isolated on both sides transperutally from the middle of the posterior leaf of broad uterine ligament. Uterine artery isolated transparietally and using high-frequency coagulator AVTOKON 350 with monocoagulation coagulated in the «spray coagulation» mode at t3 coagulation effect (stage 3). Resection of the round ligament of the uterus, pelvic and sacro-uterine ligaments also performed using monocoagulation. Dissecion and relegation of plica vesico-uterina carried out by sharp and blunt ways with scissors to identify the vagina. Clipping of uterine neck from fornix of vagina performed in the «anatomical area» of uterine manipulator of Clermont-Ferrand.

Then removed the uterus with appendages through the vagina and sutured it outside with nodal catgut sutures. Peritonization was not produced. After surgery was held sanation of the abdominal cavity, a thorough inspection and hemostasis of the surgical field and its drainage. The postoperative period in 1 (0.5 %) patient was complicated by the expiration of bile from the stump of the cystic duct. Performed relaparoscopy and the imposition of additional titanium clips. There were no deaths.

Minilaparotomic cholecystectomy with calculous cholecystitis and a simultaneous laparotomic hysterectomy was performed in 40 patients. For these operations, used a set of surgical instruments designed by M. I. Prudkov. A set of tools for minilaparotomy includes: round-support for fixing the mirror-retractor (retractor), mobile narrow mirrors, one of which is equipped with a point light source, connected via fiber with fiberoptic illuminator. Minilaparotomic cholecystectomy was performed with access through pararectal incision, the incision length not exceeded 6 cm, which was enough to secure manipulation in the area of hepatic-duodenal ligament. Laparotomic hysterectomy was carried out in the usual manner on the Pfannenstiel incision. Duration of operations increased compared with laparoscopic surgery 20 ± 1.2 min. Blood loss was within the range of 120–150 ml. In 1 (0.5 %) patients developed early postoperative parenchymal bleeding from the vagina stump in the postoperative period. It was made relaparotomy — ligation of the internal iliac arteries. The postoperative period was uneventful. There were no deaths.

Greatest interest is the combination of transvaginal hysterectomy and umbilical hernia. This pathology was in 20 patients. Indications for these operations was complete uterine prolapse and urinary incontinence during tension, prolapse of the vagina and the presence of umbilical hernia. The operation started with hystereotomy, because the presence of postoperative infection in umbilical wound can lead to recurrent herniation. Then performed hystereotomy through the vagina by Stäckel method.

In the control group, all patients were carried out isolated operations: hysterectomy — 33 (35.4 %) patients, transvaginal hysterectomy — 21 (22.5 %), the front colporrhaphy and posterior colpotomy and umbilical hernia. This pathology was in 20 patients. In — 1 (0.5 %) patients developed early postoperative parenchymal bleeding from the vagina stump in the postoperative period. It was made relaparotomy — ligation of the internal iliac arteries. The postoperative period was uneventful. There were no deaths.

Comparative study of two statistically comparable groups of patients who performed simultaneous and single operation, by clinical and laboratory studies have shown that the body of the patient doesn’t change significantly, after the simultaneous interventions.

Determining the degree of blood loss in the main and control groups showed that in the main group during simultaneous operations blood loss was 94.4 ± 11.7 ml. and in the control group blood loss during surgery 85.4 ± 16.4 ml. The above mentioned clearly shows, that the difference in blood loss during simultaneous and isolated operations is negligible.

Our experience of performing simultaneous gynecological laparoscopic operations completely performed by laparoscopic method and combined with conventional accesses reveals the advantages of the method primarily due to less traumatism and cosmetic effect. Therefore, choosing the access, recently we start from being able to perform any operation or stage with any less traumatic way, whether laparoscopic or mini access.

When comparing the surgical approach the use of laparoscopic techniques has reduced the traumatism of access — incision length up to 1 cm. at both stages of laparoscopic surgery. Incision length was identical (12–13 cm.) in main and control groups during simultaneous operations with laparotomy access.

The total duration of the operation in the main group was 87.13 ± 13.2 min., and in the control group 77.13 ± 11.1 min. During the laparoscopic simultaneous operations total operative time decreased by an average of 21 minutes.
Hemodynamic performance and tolerance to physical activity in women with rheumatic heart diseases

Abstract: We have studied the parameters of central hemodynamics in relation to the physical activity tolerance in women with rheumatic heart disease. The increase of the depth and severity of the valve apparatus lesions is associated with an increase of functional class of heart failure. In pregnant women with rheumatic heart diseases, the heart failure signs develop on the background of minimal changes of linear and volumetric parameters of the myocardium, which does not exceed the normal limits.

Keywords: pregnancy, rheumatic heart disease, heart failure, functional class, functional state of the cardiovascular system.

During many years, the rheumatic diseases were frequent extra genital pathology in pregnant women [5]. But in recent decades, due to the successful prophylaxis of fever, the incidence of the current disease in pregnant women has slightly decreased [2]. Recently, it was observed that there has been an increase in the number of pregnant women and mothers suffering from heart diseases, which is explained by a number of reasons: the early diagnosis of such diseases; the opportunity to save the pregnancy in cases, which were previously impossible; the increase in the number of women under gone the heart surgery; and the number of seriously ill women, who make a decision to continue the pregnancy with the permission of doctors or on their own, being confident in the success of medical science and practice. The exacerbation of rheumatoid process has also an adverse effect on fetal development, it increases the risk of developing of complications from the mother’s side during the pregnancy, the childbirth and the postpartum period. This is explained by the fact, that pregnancy increases the load on the cardiovascular system (CVS), even in healthy women; while at a risk of hemodynamic changes due to existing defects, the load increase many times [3; 4]. An increase in the frequency of premature births, incidence of pathological blood loss during delivery and perinatal mortality is observed depending on the severity of heart failure (HF) [6]. In this regard, it is important to consider the assessment of physical performance as an indicator of myocardial reserve capacity. According to ESC, it is recommended to use the exercise testing for the objective evaluation of the functional activity of the pregnant woman [1]. But in the available literature, we have not found an answer to: what kind of exercise testing exactly is advisable to apply for pregnant women? So, the assessment of physical performance and capacity, in our view, is preferably to carry out with the most physiological method, namely, a six-minute walking test in order to evaluate the risk of cardiovascular complications.

Objective
To estimate the parameters of central hemodynamics in relation to exercise tolerance in women with rheumatic heart disease.

Methods and materials of investigation
The study involved 70 pregnant women at the age of 19–35 years, with rheumatic heart disease in the 2nd and 3rd trimester of gestation. Along with the considering and evaluating the complaints and anamnestic data, a physical examination was also fulfilled during pregnancy. The evaluation of the functional state of the cardiovascular system was carried out comprehensively, taking into account electrocardiographic