

## "ACUTE ABDOMEN" IN GYNECOLOGY AND MODERN POSSIBILITIES

Khudoyarova Dildora Rakhimovna<sup>1</sup>, Tursunov Nuriddin<sup>2</sup>, Shopulotova Zarina  
Abdumuminovna<sup>3</sup>

<sup>1</sup>Samarkand State Medical University, DcS, professor of department Obstetrics and gynecology  
№1

<sup>2</sup>Samarkand State Medical University, available applicant of department Obstetrics and  
gynecology №1

<sup>3</sup>Samarkand State Medical University, assistant of department Obstetrics and gynecology №1

<https://doi.org/10.5281/zenodo.10397487>

**Abstract.** *The frequency of acute gynecological diseases requiring surgical intervention is 26% of the total number of gynecological pathologies. purpose of the study to compare laparoscopic and laparotomic methods of treating acute abdomen in gynecological patients in the city of Samarkand. Based on the data, we can say that laparoscopy is taking the place of laparotomy in large steps, which is justified. Laparoscopy has better efficiency, less blood loss, reliable hemostasis and less trauma to organs.*

**Keywords:** *Samarkand, acute gynecological diseases, laparoscopic and laparotomic methods.*

### Introduction

Acute abdomen refers to the sudden onset of severe abdominal pain that often requires urgent medical attention. While commonly associated with surgical emergencies, such as appendicitis or bowel obstruction, acute abdomen can also occur in gynecological conditions. In this context, it refers to the acute presentation of gynecological pathologies that manifest with abdominal pain and necessitate prompt evaluation and management. Gynecological causes of acute abdomen can encompass a broad range of conditions, including ovarian cysts, ectopic pregnancy, pelvic inflammatory disease (PID), ovarian torsion, uterine fibroids, and endometriosis, among others. These conditions can present with varying degrees of severity, and timely diagnosis is crucial to prevent complications and optimize patient outcomes. Modern medicine has witnessed remarkable advancements in the diagnosis and management of acute abdomen in gynecology. Technological innovations, improved imaging modalities, and enhanced surgical techniques have significantly contributed to more accurate diagnoses, better surgical interventions, and improved patient care. One of the key modern possibilities in the evaluation of acute abdomen is the utilization of advanced imaging techniques. Ultrasound, computed tomography (CT), and magnetic resonance imaging (MRI) play pivotal roles in visualizing the pelvic organs, assisting in the identification of potential gynecological pathologies, and guiding further management decisions. These imaging modalities allow for non-invasive evaluation, providing valuable insights into the underlying cause of acute abdomen and aiding in the selection of appropriate treatment strategies. Additionally, the advent of minimally invasive techniques, such as laparoscopy and robotic-assisted surgery, has revolutionized the management of acute abdomen in gynecology. These approaches offer numerous advantages over traditional open surgery, including smaller incisions, reduced postoperative pain, shorter hospital stays, and faster recovery times. They have become increasingly utilized for the surgical treatment of conditions

like ovarian cysts, ectopic pregnancy, and endometriosis, allowing for more precise interventions while minimizing patient morbidity. Furthermore, the multidisciplinary approach to gynecological emergencies has enhanced the management of acute abdomen. Collaboration between gynecologists, general surgeons, radiologists, and other specialists ensures comprehensive evaluation, accurate diagnosis, and appropriate treatment plans. This interdisciplinary teamwork facilitates the integration of various perspectives and expertise, leading to optimal patient outcomes.

**Relevance.** The frequency of acute gynecological diseases requiring surgical intervention is 26% of the total number of gynecological pathologies [1, 3, 11]. When providing emergency care to gynecological patients, until recently and locally, laparotomic access is still used, which in the future can lead to disruption of menstrual functions, fertility, and so on. These problems can be solved by laparoscopic surgery, which has recently become increasingly important due to minimal trauma. According to data in modern gynecological clinics, these operations are gradually taking leading positions; up to 70-90% of surgical interventions in foreign countries are performed laparoscopically [8, 9, 15].

In a full-scale study including 1771 girls under 17 years old, Dyakanova E.Yu. et al., (2018) presented data on the effectiveness of laparoscopic and open operations in girls with various forms of gynecological pathology. The authors found that laparoscopic operations provide cosmetic benefits, reduce the duration of the operation and the amount of intraoperative blood loss, reduce the duration of postoperative pain relief, and restore peristalsis and enteral nutrition faster. In addition, the length of stay of patients in hospital is reduced by 2 times [4, 7, 16].

**Aim of the study.** To compare laparoscopic and laparotomic methods of treating acute abdomen in gynecological patients in the city of Samarkand.

**Materials and methods.** For comparative characteristics, 20 patients were taken who were admitted with symptoms of “acute gynecological abdomen” and who sought emergency medical care at the Samarkand branch of the Republican Scientific Center for Emergency Medical Care in 2023. The women examined during the study were divided into 2 groups depending on the method of surgical intervention used: the first group - 10 women operated on by the laparoscopic method and the second group - 10 women operated on by the laparotomy method.

The examination of women included: determination of clinical and anamnestic features, laboratory diagnostics (general blood test, general urinalysis, blood clotting test, coagulogram, biochemical blood test), instrumental methods (ultrasound diagnostics of the pelvic and abdominal organs).

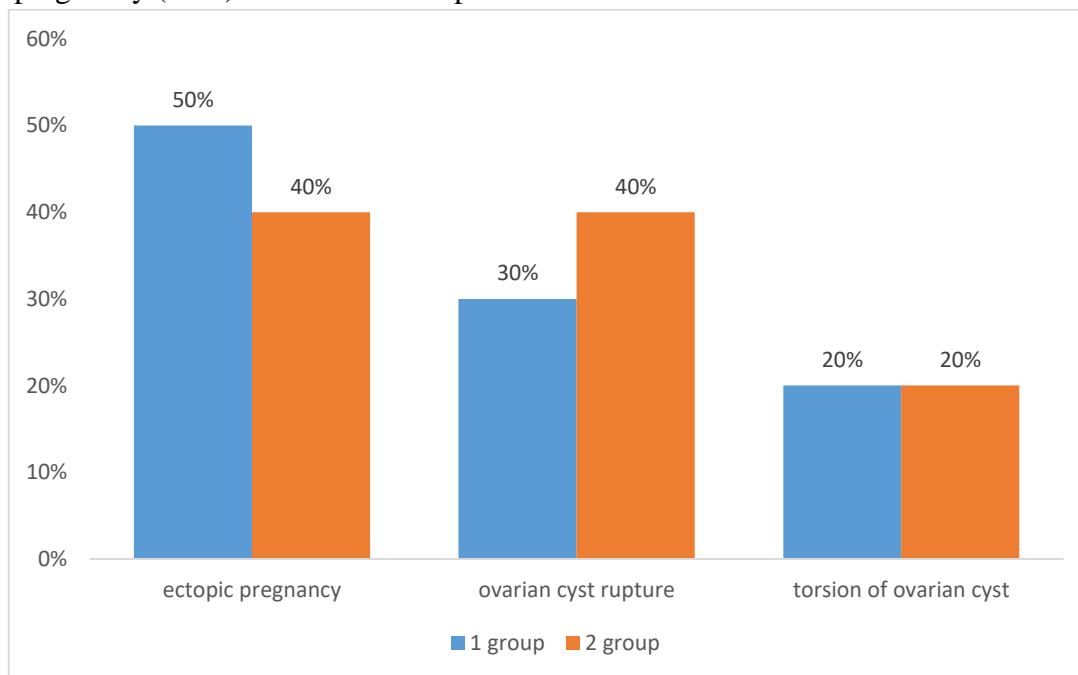
General blood test indicators were calculated automatically on hematological analyzers such as “CELL-DYN 1700” and “CELL-DYN 400” ABBOTT DIAGNOSTICS (USA), the sedimentation rate of individual erythrocytes was determined after 1 hour using a 5% 0.25 sodium nitrate solution.

Biochemical blood tests were carried out using the following devices: “EXPRESS PLUS” developed by “BAYER” (Germany). Total and indirect bilirubin, blood sugar, urea, and creatinine were determined. Blood electrolytes were monitored as indicated by Medica Corp. blood electrolytes. On an ion-selective analyzer “Easy Lyte” (USA). The study of a general urinalysis included a microscopic examination of the sediment, which revealed the presence of leukocytes, erythrocytes, bacteria, salt crystals, casts, and epithelial cells; the presence of protein was determined with a 3 or 15% solution of sulfalicylic acid.

Since the number of observations was small, only average values and their deviations were taken into account.

**Results and discussion.** The age of the patients ranged from 22 to 48 years, with an average of 33.4±2.2 years. All patients complained of acute pain in the abdomen and lower abdomen and had a clinical picture of an acute abdomen. There were no peculiarities in the life history and heredity data.

All patients underwent a standard examination based on the protocol and were given a diagnosis and indications for surgical treatment. In the structure of diagnoses (Fig. 1), ectopic pregnancy (50%) dominated in the first group, and in the second group, cyst rupture (40%) and ectopic pregnancy (40%) shared the main place.



**Figure 1. Structure of diagnoses**

In general, the volume of surgery was the same in both groups. The average operation time for the laparoscopic method took 40-45 minutes in all cases, and for laparotomy the operation time had a different variation in 5% of cases the operation was done in 15 minutes, while in 20% of cases it took 85 minutes, although in most cases also as with laparotomy, it took 40-45 minutes. Given the variations in our hearing, laparotomy took about an hour on average.

Total blood loss in laparoscopic operations ranged from 50 ml to 600 ml. Whereas in the laparotomy method this figure was much higher from 350 ml to 1200 ml. In one case, grade 3 hemorrhagic shock and hemoperitonium in a volume of 800 ml were recorded. Certain patients had complications in the form of adhesions from previously performed surgical interventions (caesarean section, myomectomy, etc.), which complicated access and lengthened the surgical site. When clarifying previously performed operations, all women had only laparotomy.

**Conclusion.** Based on the data, we can say that laparoscopy is taking the place of laparotomy in large steps, which is justified. Laparoscopy has better efficiency, less blood loss, reliable hemostasis and less trauma to organs.

## REFERENCES

1. Broach A, Mansuria SM, Sanfilippo JS. Pediatric and adolescent gynecologic laparoscopy. Clin Obstet Gynecol. 2009; 52(2): 380-9; Chan SH, Lara-Torre E. Surgical considerations

- and challenges in the pediatric and adolescent gynecologic patient. *BestPractRes Clin Obstet Gynaecol.* 2018; 48(1): 128-36
2. Khudoyarova D. R., Shopulotova Z. A., Solieva Z. M. PREVENTION OF COMPLICATIONS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 5. – С. 25-29.
  3. Kadhem A. H., Muhsin A. A. A., Al-Sewadi W. H. Acute appendicitis and associated pathologies in females //Basrah Journal of Surgery. – 2020. – Т. 26. – №. 1. – С. 69-73.
  4. Rakhimovna K. D., Abdumuminovna S. Z. Traumatization of the genital organs. – 2022.
  5. Shernazarov Farrukh ORGANIZATION OF DIGITALIZED MEDICINE AND HEALTH ACADEMY AND ITS SIGNIFICANCE IN MEDICINE // SAI. 2023. №Special Issue 8. URL: <https://cyberleninka.ru/article/n/organization-of-digitalized-medicine-and-health-academy-and-its-significance-in-medicine> (дата обращения: 20.11.2023).
  6. Shopulotova Z. COMPARATIVE ANALYSIS OF CLINICAL CASES OF EXACERBATION OF CHRONIC PYELONEPHRITIS IN PREGNANT WOMEN //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 8. – С. 22-25.
  7. Shopulotova Z. A., Zubaydilloeva Z. K., Khudoyarova D. R. COMORBID EVENTS IN PREGNANT WOMEN WITH PYELONEPHRITIS AND PREVENTION OF THESE CONDITIONS //Бюллетень педагогов нового Узбекистана. – 2023. – Т. 1. – №. 9. – С. 35-38.
  8. Shopulotova Z. A., Zubaydilloeva Z. K. THE VALUE OF ULTRASOUND DIAGNOSTICS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 9. – С. 19-22.
  9. Shopulotova Z. A., Zubaydilloeva Z. K. PERINATAL CARDIOLOGY: PREGNANCY AND CONGENITAL HEART DEFECTS //Евразийский журнал академических исследований. – 2023. – Т. 3. – №. 9. – С. 55-59.
  10. Shopulotova Z. A. et al. PHENOMENA OF COMORBIDITY IN PREGNANT WOMEN WITH PYELONEPHRITIS.
  11. Shamatov I., Shopulotova Z. ADVANNAGES OF PALATE LASER THERAPY IN COMPLEX TREATMENT OF LARINGITIS //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 9. – С. 104-107.
  12. Shamatov I. Y. et al. COMPREHENSIVE AUDIOLOGICAL STUDIES SENSORY NEURAL HEARING LOSS OF NOISE GENESIS //American Journal Of Social Sciences And Humanity Research. – 2023. – Т. 3. – №. 10. – С. 128-132.
  13. Syed S. et al. Fallopian tube torsion secondary to paraovarian fimbrial cyst: a difficult to diagnose and a rare cause of acute abdomen in adolescent //Cureus. – 2021. – Т. 13. – №. 9.
  14. Shamatov I. Y., Shayqulov H. S. H., Shopulotova Z. A. O'RTA QULOQNING ZAMBURUG'LI ZARARLANISHLARI //Евразийский журнал медицинских и естественных наук. – 2022. – Т. 2. – №. 6. – С. 425-427.
  15. Yang H. et al. Diagnosis and analysis of transabdominal and intracavitary ultrasound in gynecological acute abdomen //Computational and Mathematical Methods in Medicine. – 2021. – Т. 2021.

16. Абдикулов Б. С., Касымова Д. М. Лапароскопия в ургентной гинекологии: результаты лечения //Вестник неотложной и восстановительной хирургии. – 2018. – Т. 3. – №. 2. – С. 105-114
17. Дьяконова Е. Ю. и др. Лапароскопическая хирургия при острой гинекологической патологии у девочек //Российский педиатрический журнал. – 2018. – Т. 21. – №. 4. – С. 196-202
18. Икаев З. Э., Таймазова А. С. НЕОТЛОЖНЫЕ СОСТОЯНИЯ В ГИНЕКОЛОГИИ. ПЕЛЬВИОПЕРИТОНИТ //Трибуна ученого. – 2020. – №. 2. – С. 181-186.
19. Малышкина А. И., Батрак Н. В. ОСТРЫЙ ЖИВОТ В ГИНЕКОЛОГИИ: АНАЛИЗ СТРУКТУРЫ ОПЕРАТИВНЫХ ВМЕШАТЕЛЬСТВ ПРИ РАЗЛИЧНЫХ УРГЕНТНЫХ СОСТОЯНИЯХ //Вестник Ивановской медицинской академии. – 2021. – Т. 26. – №. 3. – С. 44-47.