



## Evaluation of the Results of Treatment of Patients with Hernias of the Anterior Abdominal Wall

Makhmudov Saydinjon Botirovich<sup>1</sup>, Babajanov Akhmadjon Sultanbaevich<sup>2</sup>

<sup>1</sup>Assistant of the department of surgical diseases of the pediatric faculty, Samarkand City Medical Association, Samarkand State Medical University, Samarkand, Republic of Uzbekistan

<sup>2</sup>PhD, docent, head of the department of surgical diseases of the pediatric faculty, Samarkand City Medical Association, Samarkand State Medical University, Samarkand, Republic of Uzbekistan

ARTICLE INFO	ABSTRACT
<b>Published Online:</b> 05 July 2022	Herniology, including in our country, is one of the most rapidly developing branches of surgery today. New technologies, techniques, endoprostheses are being developed and introduced into clinical practice, clinical studies are being conducted, and the evidence base is being improved. Dozens of conferences, schools, master classes devoted to the problem of hernia surgery are organized annually in Uzbekistan, professional organizations are actively working, uniting dozens, if not hundreds of surgeons calling themselves herniologists. It is all the more surprising that so far not a single study has been conducted in our country that would allow us to assess the scale of the problem.
<b>Corresponding author:</b> Makhmudov Saydinjon Botirovich	
<b>KEYWORDS:</b> Herniology, Hernia of the anterior abdominal wall, Complications.	

### INTRODUCTION

Hernias of the anterior abdominal wall are one of the most common surgical diseases. More than 20 million hernias are performed worldwide every year [1].

The prevalence of hernias of the anterior abdominal wall in the Republic of Uzbekistan is an unknown quantity, and the phrases on duty for almost every article in a journal or a speech at a conference about the high frequency of this disease are at best based on foreign data obtained, including in African countries. For example, when examining men in West Jerusalem, 18 patients with inguinal hernia per 100 people under the age of 25 were identified, with an increase in their number to 47 over the age of 75 [2, 3]. According to African authors, the prevalence of inguinal hernia among the Ghanaian population is 3.15% [4, 5]. In Nigeria, umbilical hernia was detected in 102 (1.3%) of 7968 children [6].

### THE PURPOSE OF THE RESEARCH

Analysis of the results of treatment of patients with hernias of the anterior abdominal wall.

### MATERIALS AND METHODS OF THE RESEARCH

In the surgical department of the Samarkand City Medical Association, the results of the treatment of 4,202 patients operated on in the last 4 years were analyzed. Of the 4,202 operations performed, 730 patients (17.3%) underwent surgery with external and anterior abdominal hernias, 209

men (31.5%), 521 women (68.5%). The patients ranged from 18 to 81 years old, and the average age was 52.2±4.2 years. Thus, out of 730 patients, 525 (72%) patients were operated with inguinal hernias, 160 (21.9%) with anterior abdominal wall hernias and postoperative ventral hernias, 18 (2.46%) with umbilical hernia, 17 (2.3%) with hip hernia and 10 (1.49%) patients with white line hernia belly.

### RESULTS AND THEIR DISCUSSIONS

As a result of a retrospective study of clinical material using statistical and analytical methods of examination, we identified 3 groups of complications of hernias of the anterior abdominal wall, the most common in practice:

1. An irreducible hernia;
2. Inflammation of the hernial sac;
3. Infringement of hernias.

An irreducible hernia is a complication with the formation of scars between the hernial sac and the organ contained in the hernia, due to trauma (trauma) or aseptic inflammation [7]. Timely detection and planned surgical treatment of patients with such a complication is necessary. Of the 525 patients with inguinal hernias that we observed, 153 patients were found to have hernia repair, and mostly they were elderly people.

The main 2 factors play an important role in the development of inflammation of the hernial sac. The first factors that cause inflammation that occurs on the surface

from the inside include hernia infringement, the development of acute appendicitis and Meckel's diverticulitis. From external factors, inflammatory skin diseases (furuncle, carbuncle) and skin injuries in the area of various hernias (maceration, suppuration, scratches) are distinguished. Inflammation of the hernial sac was observed in 17 (3%) patients and was found mainly in obese women, people with diabetes mellitus and strangulated hernias.

Pinched hernia (hernia incarcerata) is an extremely dangerous complication that requires immediate surgical intervention. The organs that come out of the hernial sac are compressed in the neck of the hernia, which leads to a violation of blood circulation and lymph circulation, which creates a risk of organ necrosis [8].

We analyzed our four-year observations in order to improve the results of surgical treatment of strangulated abdominal hernias in order to clearly determine the tactics of their treatment and surgery. Over the years, 730 patients were urgently operated on. Of these, 50 patients (4.8%) were operated on with pinched abdominal hernias. Among them, infringement of inguinal hernias was observed in 48.2%, hip hernia – in 25.1%, umbilical hernia – in 12.8%, postoperative ventral hernia – in 13.1%, hernia of the white line of the abdomen – in 0.8% of patients.

There were 40.2% of men and 59.8% of women. People over the age of 60 accounted for 64.5%. Patients who died after surgery – 15 (2.7%).

Patients went to the clinic after the onset of clinical symptoms of a strangulated hernia within 2 hours – 11%, within 3-8 hours – 13%, within 9-12 hours – 17%, within 12-24 hours – 38% and in subsequent periods 21%. Analyzing these cases, we came to the conclusion that most patients were hospitalized late due to errors in diagnosis at the pre-hospital stage.

In almost 21% of patients with hip hernia and 17% of patients with ventral hernias, hernia infringement was not detected in time. In most cases, patients were referred with diagnoses of abdominal adhesions, acute gastritis, an attack of gastric ulcer and duodenal ulcer, renal colic, acute intestinal obstruction and even acute appendicitis.

We also found that of the concomitant diseases, the majority of patients had: generalized atherosclerosis and coronary cardiosclerosis, coronary heart disease, anemia, diabetes mellitus, pneumosclerosis and other respiratory diseases. Postoperative mortality is higher among patients of this group.

The outcome of the disease again depends on which organ is clamped in the hernial sac. The small intestine was detected in 52% of cases, the large intestine- in 35.2%, the colon-in 7%, a tumor of the uterus-in 2%, a tumor of the appendix-in 1.5%, and the colon-in 1% of cases.

Necrosis of the pinched mucous membrane of the small intestine was observed in 7 patients, and four of them had gangrene of the intestinal mucosa, peritonitis developed and intestinal resection was performed. Three of them died as

a result of the development of postoperative peritonitis and thrombosis of the vessels of the intestinal mesentery. All three deceased patients were over 65 years old.

## CONCLUSIONS

Thus, the improvement of the results of the treatment of hernias and their complications depends, first of all, on the effectiveness of the interaction of outpatient and hospital doctors. One of the most important tasks of this plan is the early detection and timely implementation of surgical interventions in patients with abdominal wall hernias, before they develop complications.

## REFERENCES

1. Abdullaev, S., Rahmanov, U., Abdullaeva, L., & Toirov, A. (2020). Reviews of complications and treatment tactics for external hernias of the anterior abdominal wall. *European Journal of Molecular & Clinical Medicine*, 7(2), 2434-2439.
2. Ali, M. A., Hagbevor, I., & Abedi, E. (2022). Multiple complicated concurrent hernias with rare findings: Case Report. *International Journal of Surgery Open*, 100480.
3. Naveen, P. G., & Khan, A. (2019). Laparoscopic repairs for anterior abdominal wall hernias. *International Surgery Journal*, 6(2), 349-354.
4. Surgical Trainees in East of England Research (STEER) Collaborative. (2022). What's the SCORE? Current management of symptomatic, clinically occult, radiologically evident inguinal hernias. *The Annals of The Royal College of Surgeons of England*, 104(5), 353-355.
5. Babazhanov, A. S., Akhmedov, G. K., Tukhtaev, J. K., & Kulmakhmatov, S. Sh. (2018). Analysis of the results of hernioplasty methods for lateral myofascial defects of the abdomen. In PRIORITY DIRECTIONS FOR THE DEVELOPMENT OF SCIENCE AND EDUCATION (pp. 137-140).
6. Babazhanov, A. S., Akhmedov, G. K., Akhmedov, A. I., & Obidov, Sh. Kh. (2016). Improvement of hernioplasty methods for simultaneous abdominal diseases. "Science and Peace" International Scientific Journal, 3(6(34)), 29.
7. Kamilova, D., Babazhanov, A., Akhmedov, G., Toirov, A., & Kurbanov, H. (2017). Improving the tactics of hernioplasty for myofascial defects of the lateral wall of the abdomen. *Journal of Problems of Biology and Medicine*, (4 (97)), 48-51.
8. Babajanov, A. S., Achilov, M. T., Ahmedov, G. K., Tukhtaev, Z. K., & Saydullaev, Z. Y. (2013). Improvement of methods of hernioabdominoplasty with simultaneous surgical diseases. *SCIENCE AND WORLD*, 67.