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ADVANTAGES OF LAPAROSCOPIC HERNIOPLASTY IN WOMEN OF REPRODUCTIVE AGE

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Summary. In the traditional treatment of external abdominal hernias in women of fertile age in the early postoperative period, the frequency of surgical complications was 13.4%; in the long-term period, 8.5% of patients had a recurrence of the hernia. A critical analysis revealed that the unsatisfactory results were due to the shortcomings of tactical approaches in the possibility of performing alloplasty in women of reproductive age.

Key words: woman, reproductive age, hernioplasty.

Relevance. External abdominal hernias are one of the most common surgical diseases. The incidence increases from year to year, remaining consistently high, and amounts to 14 patients per 1000 population aged 25 to 34 years; gradually increasing, it reaches 53 per 1000 population aged 55 to 64 years.

The history of herniology spans more than a century. The earliest reference to hernia as "...a tumor-like mass appearing on the surface of the abdomen as a result of coughing or straining" was found in the Ebers Papyrus, written around 1552 BC. The first attempt at surgical treatment of inguinal hernias was performed by C. Celsus (25 BC - 40 AD). He cut the pinching ring and pushed the contents of the hernial sac into the abdominal cavity.

The modern history of hernia surgery begins in the second half of the 19th century. and is associated with the name of E. Bassini (1844-1924), who created a unified concept for the treatment of hernias. The success of hernia treatment consisted in the surgical restoration of the normal relationships of the anatomical structures in the area of the hernial protrusion. This was a revolutionary step not only in herniology, but also in the development of surgery in general. E. Bassini considered the disadvantage of the proposed methods to be that when suturing the tissues, their tension occurs and this contributes to the cutting of the sutures, which subsequently causes a recurrence of the hernia. The answer to this question was given by T. Billroth (1829-194), who said "... If it were possible to create artificial tissue in density that would not be inferior to the aponeurosis, the issue of radical treatment of hernias would be resolved." This phrase laid the foundation for allohernioplasty. Only more than 100 years later, in 1949 in France, D. Acquaviva first used synthetic nylon mesh in clinical practice. 10 years later in the USA, P.Usher used synthetic marlex mesh made from polyethylene. In the early 70s of the 20th century, I. Lichtenstein proposed a polypropylene mesh prosthesis for inguinal hernias, performing true tension-free repair.

The total number of surgical interventions in the world for abdominal hernias exceeds 20 million. The prevalence of the disease in Uzbekistan is 1.8% among the population. Among all

abdominal hernias, inguinal hernias occupy a leading place - 75% of all hernias. However, the true prevalence of hernias is an unknown quantity. For example, when examining men in Jerusalem, 18 patients with inguinal hernia were identified per 100 people under the age of 25 years, and 47 over the age of 75 years. Among the population of Ghana, the incidence of hernias of the anterior abdominal wall is 3.15%. In Nigeria, umbilical hernia was diagnosed in 102 (1.3%) of 7968 children. In the Russian Federation, in the Voronezh region, 83.5% of the residents of one of the districts were examined. With a population of 36,181 people, 672 (2.18%) patients with various hernias of the anterior abdominal wall were identified. The frequency of surgical interventions in different countries varies within different limits. For example, in the USA this is 28 operations per 100,000 population, and in England - 10 per 100,000.

Currently, herniology is one of the most rapidly developing areas of surgery, including in Uzbekistan. New technologies in the diagnosis and treatment of this pathology are being developed and widely introduced into clinical practice; many conferences and master classes dedicated to the problem of hernia surgery are held annually. At the same time, allohernioplasty has become a routine operation that is performed in almost any medical institution. The period of appearance of the first allomaterials gave way to a period of searching for the most optimal materials for this intervention, which would be made of biologically compatible material, nontoxic, would have a biologically non-degradable property during the entire time of presence in the body, and would retain the flexibility and plasticity of tissues

Considering the above, the purpose of this study was to improve the results of surgical treatment of women of fertile age with hernias of the anterior abdominal wall by substantiating a differentiated approach to the choice of allohernioplasty method.

Materials and methods. This work is based on an analysis of the results of examination and treatment of 146 patients with various types of external hernias of the anterior abdominal wall, who were examined and inpatiently treated in the 1st surgical department of the Bukhara Regional Multidisciplinary Medical Center and the Department of Thoracoabdominal Surgery of the Multidisciplinary Clinic of the Tashkent Medical Academy for the period from 2011 to 2020 The analyzed material included women of reproductive age who planned to have children in the future. All patients were divided into two groups: control - 82 patients admitted from 2011 to 2016 and main group - 64 patients who sought medical help in 2017-2020. This division is associated with tactical approaches to the treatment of this disease. The control group consisted of all women with hernias of the anterior abdominal wall who underwent traditional hernial orifice repair without the use of allomaterial. The main group is all women with hernias of the anterior abdominal wall who underwent alloplasty according to our recommendations. Research results and discussion.

All patients were operated on as planned. Of the 52 (63.4%) patients with inguinal hernias, in 50 (61.0%) cases, hernia repair was performed according to Girard-Spasokukotsky with Kimbarovsky sutures on one side, in 2 (2.4%) patients the operation was performed on both sides . Of the 17 (20.7%) women with umbilical hernias, 14 (17.0%) cases underwent hernia repair with Sapezhko plastic surgery, and 3 (3.7%) cases underwent Mayo plastic surgery. Of the total number of patients with umbilical hernias, 2 (2.4%) patients underwent simultaneous laparoscopic cholecystectomy, and 1 (1.3%) underwent laparoscopic cystectomy. 7 (8.5%) patients with hernias of the white line of the abdomen underwent hernial orifice plastic surgery according to Sapezhko. In 6 (7.3%) cases, patients with postoperative hernias underwent hernia repair with Voznesensky hernial orifice repair.

The duration of inpatient treatment ranged from 3 to 10 days, averaging 5.2 ± 1.9 days.

The incidence of early postoperative surgical complications was 13.4% (11 observations). In 7 (8.5%) cases, there was an accumulation of exudate in the residual wound cavity - seroma of the postoperative wound. In all cases, fluid evacuation and conservative therapy were performed in a hospital setting. After discharge from the hospital, the duration of the outpatient stage of treatment for these patients ranged from 6 to 19 days. In 1 (1.2%) patient, on the 3rd day after surgery, a hematoma developed in the middle part of the postoperative wound in the groin area. One suture was released and a hematoma in a volume of about 30 ml was emptied. Against the background of therapy in inpatient settings, and subsequently in outpatient settings, primary healing of the postoperative wound was noted. In 1 (1.2%) patient with a postoperative hernia against the background of wound seroma, necrosis of the wound edges was noted. On an outpatient basis, the edges of the wound were excised and secondary sutures were applied.

The duration of outpatient treatment was 29 days. In 2 (2.4%) cases, subcutaneous suppuration of the postoperative wound was noted. Local sanitation of the wound with removal of pus and daily ointment dressings contributed to the cleansing of the wound and the appearance of granulation tissue, which made it possible to apply secondary sutures on an outpatient basis on days 19 and 25 after surgery.

Among the general complications in the early postoperative period, in 1 (1.2%) patient after surgery for a hernia of the linea alba, the postoperative period was complicated by the development of pneumonia. Appropriate conservative therapy allowed the patient to be discharged on the 10th day after surgery.

In the long-term period of up to 4 years, all observed patients became pregnant, which ended in childbirth. It should be noted that in 21 (25.6%) cases, delivery was carried out by caesarean section. In 7 (8.5%) patients, at various stages of pregnancy and in the postpartum period up to 1.5 years, a recurrence of the hernia was observed. Moreover, in 2 (2.4%) cases, a strangulated hernia developed, which required emergency surgery. The remaining 5 (6.1%) patients were operated on as planned.

Thus, the analysis of the clinical results of treatment of patients in the control group showed that the frequency of complications in the early and late postoperative periods was quite high (23.2%), but no deaths were noted. A critical analysis of unsatisfactory results in the control group shows shortcomings in tactical issues in the possibility of performing alloplasty in women of reproductive age. Taking into account the above, we have planned experimental studies to substantiate the feasibility of performing alloplasty for patients of reproductive age who plan to have children.

Conclusions: In the traditional treatment of external abdominal hernias in women of fertile age in the early postoperative period, the frequency of surgical complications was 13.4%; in the long-term period, 8.5% of patients had a recurrence of the hernia. A critical analysis revealed that the unsatisfactory results were due to the shortcomings of tactical approaches in the ability to perform alloplasty in women of reproductive age.

Literature

1. Spaziani T.S., Di Cello P., Lo Bianco G. "All In One Mesh Hernioplasty" device for inguinal hernia repair. Results of 400 cases // Ann. Ital. Chir. – 2018. – Vol. 89. – P. 438–442.

2. Steensel S., Hil L., Bloemen A. Prevention of incisional hernia using different suture materials for closing the abdominal wall: a comparison of PDS, Vicryl and Prolene in a rat model // Hernia. -2020. - Vol. 24, No 1. - P. 67-78.

3. Trippoli S., Caccese E., Tulli G. Biological meshes for abdominal hernia: Lack of evidence–based recommendations for clinical use // Int. J. Surg. – 2018. – Vol. 52. – P. 278–284.

4. Zhang L. Incidence of abdominal incisional hernia in developing country: a retrospective cohort study // Int J Clin Exp Med. – 2015. – Vol. 8, № 8. – P. 13649-13652.

5. Zucker B.E., Simillis C., Tekkis P., Kontovounisios C. Suture choice to reduce occurrence of surgical site infection, hernia, wound dehiscence and sinus/fistula: a network meta-analysis // Ann R Coll Surg Engl. – 2019. – Vol. 101, N_{2} 3. – P. 150-161.

6. Khamdamov I.B. Improving tactical approaches in the treatment of hernias of the anterior abdominal wall in women of fertile age // Tibbiyotda Yangi kun. Bukhoro, 2022.-№10(48)- pp. 338-342.

7. Khamdamov I.B. Morphofunctional features of the abdominal press in women of reproductive age // Tibbiyotda Yangi kun. Bukhoro, 2022.-№3(41)- pp. 223-227.

8. Khamdamov I.B. Clinical evaluation of the effectiveness of the traditional approach to the treatment of hernias of the anterior abdominal wall in women of fertile age // Doctor's Bulletin. – Samarkand 2022. No. 2.2 (104).-P.65-70.Khamdamova M.T. Ultrasound features of three-dimensional echography in assessing the condition of the endometrium and uterine cavity in women of the first period of middle age using intrauterine contraceptives // Biology va tibbyot muammolari. - Samarkand, 2020. - No. 2 (118). - P.127-131.

9. Khamdamova M. T. Ultrasound assessment of changes in the endometrium of the uterus in women of the first and second period of middle age when using intrauterine and oral contraceptives // Биомедицина ва амалиёт журнали. – Ташкент, 2020. - №2. - 8 часть. - С.79-85.

10. Khamdamov I.B., Khamdamov A.B. Endovideosurgical hernioplasty in women of fertile age // New day in medicine. 2021. №6 (38/1).P.25-27.

11. Khamdamova M. T. Anthropometric characteristics of the physical status of women in the first and second period of middle age // A new day in medicine. Tashkent, 2020. - N_{2} 1 (29). - C.98-100.

12. Khamdamov I.B., Khamdamov A.B. Classification and properties of mesh explants for hernioplasty of hernial defects of the anterior abdominal wall (review) // Biology and integrative medicine. ISSN 2181-8827 2021. №5 – March, April (52).C.12-22.

13. Khamdamova M.T. Age-related and individual variability of the shape and size of the uterus according to morphological and ultrasound studies // News of dermatovenereology and reproductive health. - Tashkent, 2020. - No. 1-2 (88-80). - P.49-52.

14. Khamdamova M.T. Ultrasound features of three-dimensional echography in assessing the condition of the endometrium and uterine cavity in women of the first period of middle age using intrauterine contraceptives // Biology va tibbyot muammolari. - Samarkand, 2020. - No. 2 (118). - P.127-131.

15. Khamdamova M. T. Ultrasound assessment of changes in the endometrium of the uterus in women of the first and second period of middle age when using intrauterine and oral contraceptives // Биомедицина ва амалиёт журнали. – Ташкент, 2020. - №2. - 8 часть. - С.79-85.

16. Khamdamova M. T. Anthropometric characteristics of the physical status of women in the first and second period of middle age // A new day in medicine. Tashkent, 2020. - N_{2} 1 (29). - C.98-100.

17. Khamdamova M.T. Age-related and individual variability of the shape and size of the uterus according to morphological and ultrasound studies // News of dermatovenereology and reproductive health. - Tashkent, 2020. - No. 1-2 (88-80). - P.49-52.