

## HERNIOABDOMINOPLASTICS OF POSTOPERATIVE VENTRAL HERNIA IN PATIENTS WITH OBESITY OF III-IV DEGREE

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**Abstract:** the work is based on the analysis of hernia repair in 208 patients with postoperative, recurrent and primary ventral hernias obese. The patients were divided into two groups: a control group and the main group. Patients in the control group performed classical hernia repair with local tissues and prosthetic materials indicated. In the study group patients underwent hernia repair using mesh implants with the addition dermatolipidektomy. The reliability of plastics hernia ring is provided by a polypropylene prosthesis and perform no compression hernioalloplastic and combined technique allowed to avoid increasing intra-abdominal pressure due to the increase in the abdominal cavity. As a result of dermatolipidektomy managed to reduce the number of complications in the near (9.8%) and late postoperative period. Disease recurrence and death were not.

**Keywords:** hernioalloplastic, obesity, dermatolipidektomy.

## ГЕРНИОАБДОМИНОПЛАСТИКА ПОСЛЕОПЕРАЦИОННЫХ ВЕНТРАЛЬНЫХ ГРЫЖ У БОЛЬНЫХ С ОЖИРЕНИЕМ III-IV СТЕПЕНИ

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**Аннотация:** работа основана на анализе результатов герниопластики у 208 больных послеоперационными, рецидивными и первичными вентральными грыжами, страдающих ожирением. Больные были разделены на две группы: контрольная группа и основная группа. Пациентам контрольной группы производилась классическая герниопластика местными тканями и протезирующими материалами по показаниям. В основной группе пациентам выполнялась герниопластика с использованием сетчатых имплантатов с дополнением дерматоллипидэктомии. Надежность пластики грыжевых ворот обеспечивается за счет полипропиленового протеза, а выполнение ненатяжной герниоаллопластики и комбинированной методики позволило избежать повышения внутрибрюшного давления за счет увеличения объема брюшной полости. В результате применения дерматоллипидэктомии удалось снизить количество осложнений в ближайшем (9,8%) и отдаленном послеоперационном периоде. Рецидивов заболевания и летальных исходов не было.

**Ключевые слова:** герниоаллопластика, ожирение, дерматоллипидэктомия.

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**Introduction.** Despite the rapid development of minimally invasive endovideosurgical technologies in abdominal surgery the number of surgical procedures using conventional laparotomy remains high, after which incisional hernias (IH) develop up to 18% of the cases. In the general statistical structure of ventral hernias IH makes up 20-26% [1]. Large incisional hernias (LIH) in the structure of the abdominal hernias have a special place and they account for 3 to 14%. About 60% of patients with IH aged from 21 to 60 years old, i.e., they are a significant part of the working population [2, 3]. Results of IH treatment are characterized by a fairly high number of recurrences (from 4.3 to 46%) while in LIH recurrences reach 60% of the cases. An important problem of the ventral hernia treatment is early postoperative complications, because they are the major cause of prolonged postoperative period, additional moral and physical suffering of the patient and possible mortality [4]. Previous researches show that wound complications are observed both in using different types of meshes (polypropylene, PTFE) and methods for various locations in the tissues [5]. Therefore, the presence of many methods to prevent wound complications in the treatment of ventral hernias and significance of the issue dictate

the need to develop techniques and tactics to reduce the frequency of wound complications in the patients after hernia repair.

**Materials and methods:** From 2009 till 2016 years in surgical departments 1<sup>st</sup> and 2<sup>nd</sup> clinic of Samarkand Medical Institute were operated 208 patients with postoperative ventral hernia of abdominoanterior walls. Important factors identifying surgical tactic is localization of hernia, size defect and presence of relapsing in anamnesis. According to classification of Chervel J.P. and Rath A.M. In 152 patients accompanied obesity in several stages. 73 of them patients in the age from 27 to 68 years suffered of obesity III-IV stages and presence of manifestation dermato-fatty lining. From them 69 were women and 3 were men gender. All the patients were carried out anthropometry, including the measure of height, mass of body, computation index of body mass (IBM). Standard criteria for determine obesity – (IBM). IBM identifies in formula: weight divides in quadrate of height: 20-26 – healthy; 26-28-increasing nutrition; 28-31- obesity of I stage; 31-36-obesity of II stage; 36-41-obesity of III stage; More than 41- obesity of IV stage. The patients were separated in two groups. The control group consisted of 29 patients with obesity III-IV stages, they were performed hernia section with plastic autogenous tissue and performed complex operative treatment, including hernia section with abdominoplastic. Carried out general clinic, biochemical examinations, measuring intraabdominal pressure before and after operation. Among 73 (35,1%) patients with obesity III-IV in 61 (83,6%) had extensions down of abdomen form, in 7 (9,6%) - ovoid shape form and in 5 (6,8%) extension of upper abdomen form. Receiving presented allowed to choose optimal operative approach on hernioplatic and abdominoplastic. Operative treatment of control group patients included of plastic hernia defect of autogenous tissue and prosthesis of material indication. On prosthesis plastic transplant fixed according to method of onlay, inlay and sublay. In necessities with aim of increasing capacity of abdominal cavity for prevention of development the syndrome of few abdomen and respiratory failure, the plastic of pre-abdominal walls performed in combination method – in supplementary mobilization of vaginal straight abdomen muscle. The stage of hernia section in patients of main and control group did not distinguished. Particularities of operative treatment in main group patients was included in combination abdominoplastic. The stage of prosthesis hernioplatic with combination of abdominoplastic included the following: After manipulation of operating field on the skin of pre-abdominal walls inserted the picture of type “Anchor”, enclosing hernia pulsion, old postoperative scar and dermo-fatty ruga. After cutting the skin and hypodermatic fatty layer till aponeurosis of excessive ruga on picture removed and discharged hernia sac. The edge of dermo-fatty patches widely steamed into and out. Prosthesis of hernia defect refers on indications. After completing hernioplatic with abdominoplastic in patients on aponeurosis retained drainage of perforated tube on Redone.

**Results and discussion.** Altogether, among the examinations (n=208) spreading obesity in various degree consisted 73,1% (n=152). On this III-IV stages obesity (IBM from 36 till 60,9) had 35,1% (n=73). There were detected growing of the rate obesity in the ages. The part of the obesity made up 35,1% in women younger than 45 years, 56,3% in patients on the age from 45 to 55 years and in women older age 80,3%. Estimation of effectiveness results treatment of patients in discussing group in the quality of main criteria used of indication rate in hernia recurrence of pulsion, character and gravity of occurring complications. In dynamic examination separate anthropometric indication: mass of body (MB, kg), index of body mass (IBM, kg/m<sup>2</sup>). Also investigated the dynamic of intraabdominal pressure (IAP, mm.rt.st.), laboratorial results, current concomitant pathology and the level of life quality. From 73 treated patients one case (3,4%) finished by fatality result in control group. The cause of death was acute cardiovascular failure. Postoperative period in patients of control groups observed on 9 complications (31,0%), (infiltrate in 3, hematoma in 2, seroma in 2, lymphorrhea in 1 and purulence of wound in 1 patient. Bronchopulmonary complication observed in 7 patients, phenomena of heart failure in 5 patients, the last manifestation was in low indication of arterial pressure, acceleration of pulse, dyspnoea. The last complication obviated simultaneously with pulmonologist and cardioresuscitator. In main group complications were in 4 patients (9,1%). (purulence of postoperative wound in 1 patients, infiltrate in the area of postoperative wound in 2, necrosis of edge skin pathches in 1 patients. Bronchopulmonary complications observed in 2, heart failure in 1 patients of age 66 years suffering from postinfarction cardiosclerosis. Thus a majority number of complication observed in patients of control group. A few number of cardio-pulmonary and local complications of postoperative were marked in main group patients. On dynamic observations of control group patients the indication of body mass and relative indication of IBM, important changes did not undergo. In patients of control group on dynamic observation, indication, characterized degree of abdomen obesity important changes did not undergo. According to the IBM of patients in main group the indication of abdominal obesity carried out in global changes. This positive said on the further vital perspectives, as far as exactly abdominal type of spreading fatty tissue, in most degree associated with a high risk of cardio-vascular disease and diabetes mellitus II-type, undergo essential changes. On research level of glycemia in control group patients important changes were not detected. After 1 year of postoperative diabetes mellitus II type was detected again in 3 patients and total number such patients consisted of 12 (16,4%).

**Conclusions:** Abdominoplastic is not only cosmetic operation in patients suffering from obesity on excessive fat of deposit of abdominal wall, but also presence of postoperative ventral hernia –technical surgery using,

allowing to improve results of hernioplastics. Hernioplastics with abdominoplastics in patients postoperative ventral hernia anterior abdominal cavity suffering from obesity III-IV degree, performing after careful pre-operative preparation as rule improves the quality of life of patients and gives adequate cosmetic effect.

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