

Criteria's of choice method in surgical treatment of patients ventral hernia with concomitant obesity

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Критерии выбора метода хирургического лечения больных с вентральной грыжей с сопутствующим ожирением

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Abstract: the work based on result analysis in 208 hernioplastics patients postoperative recurrence and primarily ventral hernia suffering from obesity. The patients were divided in two groups: control and main group. The patients of control group carried out classical hernooplastics of local tissue and prosthesis materials according to indication. In main group patients performed hernioplastics with using reticulate implants with additional dermatolipidectomy.

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 и основная. 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 дерматолипидэктомии.

Keywords: hernioalloplastics, obesity, dermatolipidectomy.

Ключевые слова: герниопластика, ожирение, дерматолипидэктомия.

Introduction. Combination of anterior abdominal wall hernia with disturbances correct proportion of anterior abdominal walls and trunk, occurring result over spraining muscle and enlarging the thickness of derma-fatty folds abdomen said negatively on the results of hernioplastics [4]. Hypernormal deposit of fatty tissue on anterior abdominal walls associated with derma-fatty lining except causing esthetic inconvenient is the cause occurring functional disturbance with a side of gastrointestinal tract, cardiovascular system, respiratory organs. Under flabby folds as rule appears stabile diaper rash [3]. All these changes lead to restriction labor ability of patients, that allows to consider of plastic anterior abdominal wall as operation directed on correction not only esthetic deformation but also functional disturbances [2, 4]. That's why actual and even necessary supplement of hernioplastics dermatolipectomy (DLE) directed on restoration morphological condition of abdominal walls, preceding that changes which occurred in the results of pregnancy undergo interference, long hernia carrier, obesity [1].

Materials and methods: From 2008 till 2015 years in surgical departments 1st and 2nd clinic of Samarkand Medical Institute were operated 208 patients with postoperative ventral hernia. The patients were divided in two groups: control group (98-47,1%) and main group (110-52,9%) patients. The patients of control group carried out classical hernioplastics of local tissue and prosthesis materials due to indication. In the main group patients performed hernioplastics in using reticulated implants with additional DLE. From 208 patients were men -44 (21,1%), women-164 (78,9%). Distribution on ages: before 45 age-66 (31,7%), 46-59 ages-108 (51,9%), 60-74 ages-30 (14,4%), 75-90 ages-4 (1,9%). All patients admitted in surgical inpatients in ordered plan were examined in outpatient condition. Criteria of prepared patients in operatic surgery were absence of concomitant pathology or resistant its compensation. Important factors identification of surgical tactics are localization of hernia, size defect and presence of recidivism in amnesia. According to classification of Chervel J.P. and Rath A.M. (1999y) [3] in 67 (32,2%) patients were a large (W₃) and giant (W₄) hernia. In depressive majority patients (148-71,2%) were under umbilical (M₁) and around umbilical (M₂) hernia. A few number of patients were ventral hernia of lateral (L) and combined (M+L) location. From 208 patients 172 (82,7%) were initial (R₀) and 36 (17,3%) patients recidivism (R_n) hernia. All patients carried out general clinic, biochemical examinations. Measuring intraabdominal pressure before and after operation. Electrocardiography and ultrasound examination of abdominal cavity performed all 208 patients. Echocardiography carried out on indication suffering ischemic heart diseases. In patients of control group depended on localization and size of hernia defect carried out hernioplastics of local tissue and materials. On prosthesis plastics transplant fixed due to the method of "onlay". In necessity aimed enlarging volume of abdominal cavity for warning development of abdominal compartment syndrome, plastic of anterior abdominal walls performed unstrained methods imposition reticule on aponeurosis without its sewing, and also combination method – of additional mobilization vaginal straight abdominal muscle due to Ramirez (table 1).

Table 1. The types of hernioplastics in control group

Type of operation	n	%
Stretching method of plastics		
Autoplastics	6	65,3
Implantation of prosthesis due to "onlay" in sewing defect	4	%
	2	21,4
	1	
Unstretching methods		
Implantation of prosthesis due to "onlay" without sewing defect	6	6,1
Combination method		
Reconstruction of abdominal wall due to Ramirez in using meshes	7	7,1
Total	9	100
	8	

In main group cutting skin carried out on hernia pulsion. Then subcutaneously –fatty cellular widely cultivated before aponeurosis around hernia sac. After this carried out manipulation of hernia sac, plastic hernia defects, removal diastasis of straight abdominal muscle. All patients of control group used reticulated implant. Prophylactic syndrome of small abdomen and respiratory failure on indication performed unstrained hernioplastic without sewing aponeurosis or reconstruction of abdominal wall according to Ramirez (table 2). After completing plastic of anterior abdominal wall performed DLE due to line of previously carrying on anterior abdominal wall before operation which enclosed hernia pulsion, old postoperative scar and derma-fatty folds. All excessive derma-fatty patch consisted of 4 to 12 kg.

Table 2. The type of hernioplastics in main group

Type of operation	n	%
Stretching method of plastics		
Implantation of prosthesis due to "onlay" in sewing defect+DLE	68	61,8
Unstretching methods		
Implantation of prosthesis due to "onlay" without sewing defect	27	24,6
Combination method		
Reconstruction of abdominal wall due to Ramirez in using meshes	15	13,6
Total	110	100
	0	

After completed of hernioplastics all patients of control and main groups on aponeurosis remained drainage perforation tube, free endings which lead to lower horizontal cutting and fixed in skin and drained according to Redone. The patients of the main group aimed preventing wound complication on prosthesis during operation wished for liquidation of spreading which possible accumulation of liquids. Recommended setting drainage not always effective and often accompaniment separating from wound during long period. And also drainage is foreign body that can be promote exudation on long supplies increasing the risk of infectious. Complication. For them on sewing wound used vertical P-form raphe with wide seizure subcutaneously fatty tissue and with obligated attachment in prosthesis and deep wound [6]. Postoperative period in patients of both group administrated banding anterior of abdominal wall, antibiotic prophylaxis, early awaking, respiratory gymnastics, anticoagulants, physiotherapy. Drainage tube removed in period from 2 and 8 days under observation USD in dynamics.

Results and their discussing. In both group patients on treatment stages the dynamic of measured level of intraabdominal pressure. Proceeding from d 7 receiving results were detected regular changes of indication of intraabdominal pressure on side of their increasing stages of operation associated with dipping hernia content and hernioplastics. Performing loose hernioplastics and combinations method with mobilization of straight muscle due to Ramirez, used in 7 patients of control groups and 15 patients of main group which reached enlarging capacity of abdominal cavity allowed to avoid increasing of intraabdominal pressure. In majority patients of postoperative kept normal the function of GIT, only in 7 patients in control and 4 patients in main group undergo hernioplast according to giant ventral hernia marked paresis of intestinal, relieving medicamentally. In 6 patients of control group and 4 patients of main group observed retention of urine. In control group of brochopulmonary complication observed in 8 patients, phenomena of heart failure in 6 patients, the last manifestation of low arterial pressure of indication, acceleration of pulse, dyspnoea, and two cases (0,96%) of total number patients completed mortality. In the main group of extraabdominal complication observed in 4 patients, heart failure in 1 patients in the age 59 years suffering from postinfart of cardiosclerosis.

Wound complication in postoperative period in control group observed in 10 patients. In main group complication were in 9 patients. Thus a majority number of early complication observed in patients of control group. A few number of cardio-pulmonary and local complication of postoperative marked in the main group. Long-term period of postoperative intervention from 98 patients of control groups observed in 67 (68,4%), but from 110 patients of main group observed in 89 (80,9%) in the period from 1 to 3 years. On this control group recidivism of hernia observed in 6 (8,9%) cases, but in the main group recidivism were not observed. In dynamic observation of patients control group the indication mass of body the appreciable changes were not undergo. In patients of main group the indication of abdominal obesity undergo global changes. This positive said that the further vital perspective of exactly in abdominal type of spreading fatty tissue, majority degree associated in higher risk of cardiovascular diseases and diabetes mellitus of 2nd type, undergo of appreciable changes. On research level of leukemia in patients of control group appreciable changes were not detected. In patients of main group on research level of leukemia marked reliable decreasing of indication after carrying out treatment. Increasing level of glucose in blood 6,1 mmol/l in patients of main group were not detected. In both groups initially 108 persons (51,9%) had arterial hypertension of various degree. The analysis of research results which estimated of indication quality of life in patients of main group through 3 months postoperative marked improving of quality life in all components of research. Thus on performing hernioplastics the rate of postoperative complication significantly higher than using DLE. Giving matter had principle important as modern characteristics of patients in group using lipoabdominoplastics having appreciable benefit as due to objective such as subjective indication for patients.

Conclusions: The particularity of clinic current in patients with ventral and obesity are availability of concomitant pathology that requires separately preoperative preparation. In the results using dermatolipidectomy succeeded to decrease the number of complication in near and further postoperative period. Early complication decreased on 10,2% to 8,2% on the side organs of cardiovascular system-from 69,1% till 60,1%. Recidivism of disease and mortality result were not detected. Hernioplastics and dermolipidectomy allow to dispose of patients not only from physical suffering and inconvenience associated with them but also from condition of psychological discomfort returning them full-value life, contraction the period of socio-occupational rehabilitation.

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