

**PREVENTION OF POSTOPERATIVE INFECTIOUS COMPLICATIONS IN PATIENTS WITH GENITAL PROLAPSE****Benyuk V.***M.D., Professor Head of the Department of Obstetrics and Gynecology No3  
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According to the published data, in women of reproductive age, the incidence of genital prolapse is 63,1 per cent, and in women over 50 years of age - 50%. In the structure of indications for scheduled surgical treatment, genital prolapses occupy the third place after benign tumors of genital organs and endometriosis. 38 women aged from 42 to 63 years were examined in the postoperative period. To assess the effect of the proposed complex approach, patients of the 1st group (treatment, n = 18) received Depantol, 1 suppository intravaginally 2 times a day during 5 days, starting from the 1st day of the postoperative period. Patients of 2nd group (control, n = 20) received standard rehabilitation therapy.

Patients in both groups were subjected to a standard medical examination prior to surgery. Clinical and microbiological assessment of the treatment effect was carried out on days 1, 6 and 10 after surgery. The material for multiple investigations in dynamics was the vaginal discharge.

Therapeutic effect was assessed on the state of suture healing, absence of complaints, normalization of vaginal microflora.

So, before the operation, in the examined patients, microbiological examination of vaginal microflora before the operation did not have significant differences between the groups. Observation in the postoperative period showed that in 30% of patients in the control group the presence of dysbiosis was established, while in the main group this indicator was determined reliably less than 2 times

**Keywords:** genital prolapse, surgical treatment, infectious complications, regeneration, Depantol.

According to the published data, in women of reproductive age, the incidence of genital prolapse is 63,1 per cent, and in women over 50 years of age - 50%. In the structure of indications for scheduled surgical treatment, genital prolapses occupy the third place after benign tumors of genital organs and endometriosis [4, p. 271, 3, p. 57].

The most recent and promising direction are surgeries with the use of synthetic mesh implants. Features of the postoperative period during their use are not sufficiently studied. The incidence of purulent and septic complications in the postoperative period reaches 30% [5, p.13].

Therefore, vaginal dysbiosis before surgery, as well as that caused by the influence of stress hormones, blood loss and tissue damage during surgical treatment dramatically increases the risk of pyoinflammatory complications. Therefore, new pathogenetically justified methods of postoperative care are needed. [1, p.193,2, p. 88].

**Goal.** To assess the effect of application of the method for complex treatment in the postoperative period after plastic surgeries using vaginal approach in genital prolapse.

**Materials and methods.** 38 women aged from 42 to 63 years (average age  $52,1 \pm 0,3$  years) were examined in the postoperative period. All patients were randomized into two groups according to age and nosological form of the disease. In women, the most common diagnosis was colpoptosis (75%), rectocele (32%), cystocele (65%), pelvic floor relaxation (61%). The most common surgical interventions were vaginal wall plastic, synthetic mesh implants (98%) and colpoperineolevatoroplasty (97%).

We have developed a method for the complex management in the postoperative period, which includes the use of Ceftriaxone, Ornizole, immunomodulators, non-steroidal anti-inflammatory drugs, desagregants, antihistamine drugs and sedative ones.

Also, we included the drug with antimicrobial and metabolic components. One of these drugs is Depantol, vaginal suppositories (JSC "Nizhpharm"), the active

substances of which are dexpanthenol (0.1 g) and chlorhexidine (0.016 mg), polyethylene oxide, providing significant dehydrating effect on both the vaginal mucosa and the microbial cell.

To assess the effect of the proposed complex approach, patients of the 1st group (treatment, n = 18) received Depantol, 1 suppository intravaginally 2 times a day during 5 days, starting from the 1st day of the postoperative period. Patients of 2nd group (control, n = 20) received standard rehabilitation therapy. Patients in both groups were subjected to a standard medical examination prior to surgery. Clinical and microbiological assessment of the treatment effect was carried out on days 1, 6 and 10 after surgery. The material for multiple investigations in dynamics was the vaginal discharge. Therapeutic effect was assessed on the state of suture healing, absence of complaints, normalization of vaginal microflora.

Statistica 8,0 (StatSoft Inc., USA) was used for statistical assessment of the study results. The difference was considered reliable at  $p < 0,05$ .

**Results.** The retrospective analysis of 38 patients showed that 78,2% of patients had a history of extra-genital diseases. Among them, 70% indicated diseases of the cardiovascular, digestive and genitourinary system. 25% of patients had endocrine system disorders. Disease lasted from 1 to 25 years (average  $3,5 \pm 0,2$  years). Of all women examined, 19% had a history of one pregnancy, the others – two or more. 7 women (35%) were primiparous, 13 (65%) – multiparous ( $p > 0,5$ ).

Patients in both groups complained of moderately severe pain syndrome prior to surgery (49%), burning sensation (5,5%), minor vaginal discharge (55%). There was no complains of itch prior to surgery.

Results of bacterioscopy prior to surgery in all women showed the absence of inflammatory process and bacterial vaginosis. Thus, before the surgery, 31% of the patients were found to have coccal flora, 21% – rod-shaped, and in 46% of women – mixed flora was observed. [Fig. 1].

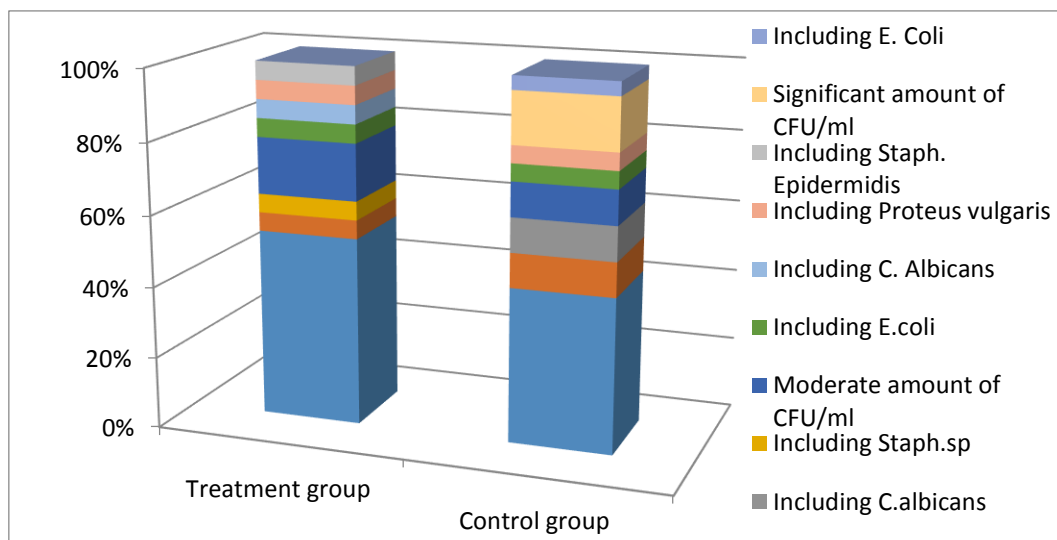


Fig.1. Bacterioscopy results in patients of both groups before treatment start

On the first day of the postoperative period, we did not find a significant difference between the groups in terms of severity of pain, hyperemia, postoperative suture swelling ( $p > 0,05$ ).

Bacteriological analysis 24 hours after surgery revealed differences in spectral analysis of microorganisms, but not in terms of microbial contamination. In the analysis of the bacteriological study results in the

postoperative period, on the 6th day, a significant growth of vaginal flora and a decrease in microbial contamination in patients of the main group vs. patients of the control group were established. Thus, women in the control group had a double amount of CFU/ml, mainly due to E. coli. While only in 1/4 of patients of the main group a moderate amount of CFU/ml was observed ( $p < 0,05$ ) [Fig. 2].

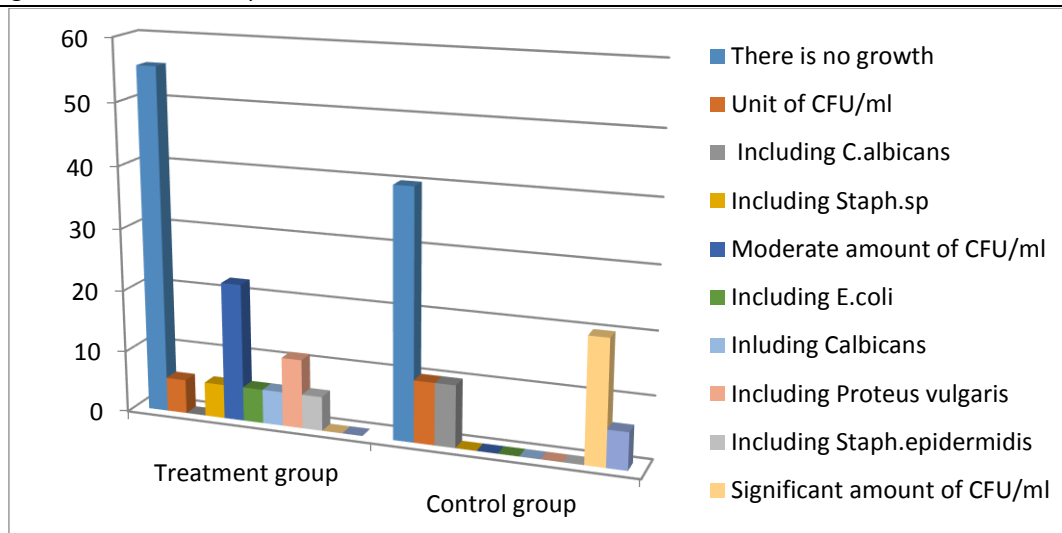


Fig. 2. Bacterioscopy results in patients of both groups on day 6 of the postoperative period.

Evaluation of the postoperative course on the 10th day revealed a significant differences between patients in different groups. Thus, in patients of the control group hyperemia and swelling of the postoperative suture were observed 4 times higher than in patients of

the main group, and complaints on pain were twice more common ( $p < 0,05$ ). Bacterioscopy data analysis showed significant decrease in the ratio of desquamated epithelial cells (in %) in patients from the main group [Fig. 3].

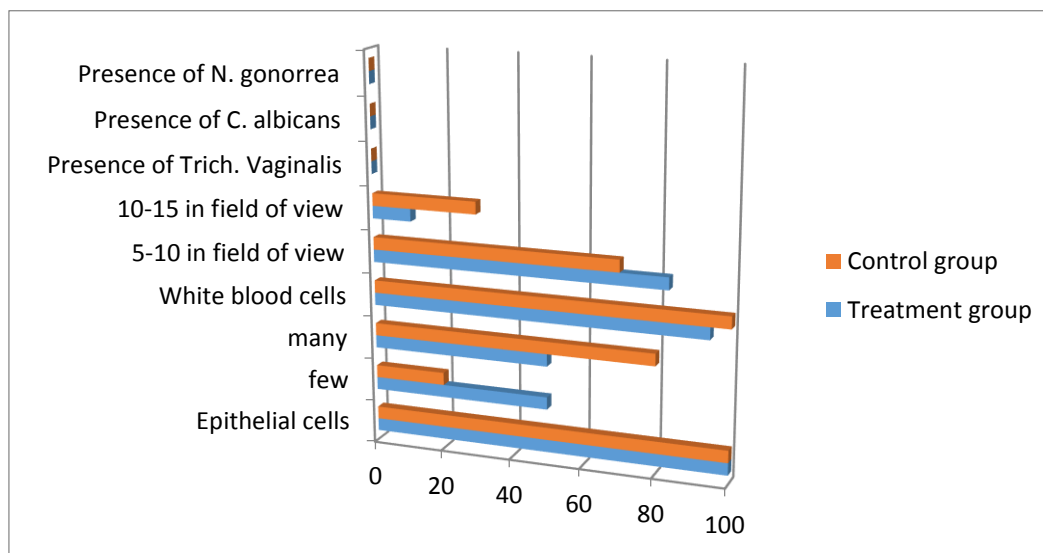


Fig. 3. Bacterioscopy results in patients of both groups on day 10 of the postoperative period.

Thus, a high clinical and microbiological efficacy (87%) of the method of complex management of the postoperative period in patients with genital prolapse after plastic surgery, performed by vaginal approach using mesh implants was established.

**Conclusions:**

The obtained results approve the efficacy of complex therapy in the postoperative period in genital prolapse, due to a significant decrease in the microbial contamination of the vagina, and the strengthening of epithelization of the postoperative wound in the postoperative period.

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