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LIFE QUALITY ESTIMATION IN WOMEN WITH STRESS URINARY INCONTIENCE IN THE DYNAMICS OF TREATMENT

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In Ukraine, the number of women suffering from stress urinary incontinence (SUI) is steadily increases. The share of SUI in the structure of urinary incontinence is 50%, and among women over the age of 40 years - 30-50% [2, 3, 7, 11].

The main cause of SUI is considered to be changes in the urogenital diaphragm, which performs a fixing and supporting function of the pelvic organs. These processes are associated with pelvic organ prolapse and physiological changes in hormonal homeostasis that associated with the course of premenopause [2, 3, 5, 6].

Special attention should be paid to women over the age of 45, because due to the estrogen deficiency appears such complications as dry tissues and the development of atrophic processes in the vagina, urethra, atrophy of the pelvic floor muscles and ligamentous apparatus of the internal genitalia [6, 7]

SUI significantly reduces the quality of life of women, leading to discomfort. The inability to control urination causes a woman to change her usual behavior, makes her more withdrawn, is accompanied by serious psychoemotional disorders (depression, psychological stress, depression), leads to severe physical and moral suffering, social maladaptation. That is why the assessment of the quality of life in women with SUI is considered extremely relevant [4, 7, 9].

Today, conservative and surgical techniques are used for SUI treatment [1]. The North American Menopausal Society and the International Society for the Study of women's Sexual Health advises to limit the systemic estrogen application that can act as etiopathogenetic treatments, emphasizing the relative safety of using topical forms of estradiol medications to reduce and prevent SUI symptoms[1, 5, 6, 11, 12, 13].

However, none of these methods contributes to the complete disappearance of SUI symptoms, and the relapse rate after the disease is high, which forces a woman to long-term follow-up and treatment, significantly worsening her quality of life, which forces doctors to search for alternative treatment methods [12, 13].

The aim of the research: to assess the quality of life before and after the CO_2-laser application in the complex treatment of stress urinary incontinence in premenopausal patients.

Materials and methods of research. 89 patients with SUI were examined. Women, depending on the prescribed therapy, are divided into two groups. The main group included 44 premenopausal women with SUI, who were offered CO_2-laser therapy in combination with local hormone therapy - estriol (based cream once a day for the first month, followed by a reduction in the dosage to one application twice a week for 7 months).

The comparison group was formed by 45 women with SUI symptoms, who were prescribed only therapy with local estriol application. The total duration of treatment for women in both groups was 8 months.

In order to assess the quality of life of women with SUI, a survey of patients was conducted using a specialized questionnaire PFDI-20 (Pelvic Floor disorder Inventory Questionnaire) [9].

To assess the female sexuality index, we used a questionnaire to calculate the index of sexual dysfunction in women (FSFI — Female Sexual Function Index) [10].

The quality of life score and female sexuality index were determined before treatment and 6 and 12 months after the start of treatment.

Results of the research and their discussion. The average age of patients in the examined groups was 46,3±2,4 years, but their structure was significantly dominated by women over the age of 52 years.

According to the results obtained in the dynamics of treatment according to the PFDI-20 questionnaire after 6 months from the beginning of treatment, there was no significant difference in the number of points in women of the studied groups (the main group – 42 points; the comparison group – 35 points; $p>0,05$). However, after 12 months from the beginning of treatment, we recorded significant differences in the median points (the main group – 18 points; the comparison group – 30 points; $p<0,05$), which indicates a decrease in SUI symptoms after four sessions of CO_2-laser in combination with local estriol therapy, in contrast to women who received only local estriol therapy.

Evaluating the index of sexual function in the dynamics of treatment according to the FSFI questionnaire, a significant increase in this indicator was noted in women of the main group (median before treatment – 25 points; 6 months from the beginning of treatment – 35 points; after 12 from the beginning of treatment – 46 points; $p<0,05$). Women in the comparison group showed a tendency to increase the index of sexual function, which had no significant differences (median before treatment – 25 points; 6 months from the beginning of treatment – 30 points; after 12 months from the beginning of treatment – 32 points; $p>0,05$).

According to the UDI-6 questionnaire, before treatment, almost a third of women in the main group and comparison group reported a feeling of pressure in the lower abdomen (the main group – 16 (36,4%), the comparison group – 19 (42,2%), a feeling of incomplete emptying of the bladder (the main group – 17 (38,6%), the comparison group – 15 (33,3%), a feeling of incomplete emptying of the intestines after the act of

defecation (the main group – 15 (34,1%), women of the comparison group – 13 (28,8%) (p>0,05).

Almost half of the women in the study groups noted the need for strong straining to empty the intestines (the main group – 20 (45,5%), the comparison group – 17 (37,8%), episodes of gas incontinence (the main group – 23 (52,3%), the comparison group – 21 (46,7%) and loss of urine by drops (the main group – 22 (50,0%), the comparison group – 21 (46,7%), urinary incontinence due to a strong urge to urinate (the main group is 30 (68,2%), the comparison group is 28 (62,2%) (p>0,05).

Almost every woman of studied groups reported rapid urination (the main group – 38 (86,4%), the comparison group – 34 (75,5%), urinary incontinence during coughing and sneezing (the main group – 42 (95,5%), the comparison group – 39 (86,7%) (p>0,05).

Evaluating the results of the UDI-6 questionnaire 12 months after the beginning of treatment, we paid attention to significant differences in the SUI symptoms in women who received CO_2-laser therapy in combination with local estriol therapy before treatment and compared to women who received only estriol locally.

The feeling of pressure in the lower abdomen was noted by 5 (11,4%) women of the main group (the main group before treatment – 16 (36,4%), p<0.05). Pelvic severity was typical for 2 (4,5%) women in the main group (the main group before treatment – 8 (18,2%), the comparison group after treatment – 7 (15,6%), p<0,05). 5 (11,4%) women who received laser treatment complained of a feeling of incomplete emptying of the bladder after treatment (the main group before treatment – 17 (38,6%), the comparison group after treatment – 12 (26,7%), p<0,05). The need for strong straining to empty the intestines was noted by 5 (11,4%) women of the main group (the main group before treatment – 20 (45,5%), the comparison group after treatment – 12 (26,7%), p<0,05).

Episodes of gas incontinence were observed in 8 (18,2%) women of the main group after treatment (the main group before treatment – 23 (52,3%), the comparison group after treatment – 14 (31,1%), p<0,05), and urinary incontinence during coughing and sneezing – 11 (25,0%) (the main group before treatment – 42 (95,5%), the comparison group after treatment – 18 (40,0%), p<0,05).

After the CO_2-laser application in combination with local estriol therapy, 14 (31,8%) women of the main group complained of stress urinary incontinence due to a strong urge to urinate (the main group before treatment – 30 (68,2%), the comparison group after treatment – 21 (46,7%), p<0,05). Drop urine loss was observed in 3 (6,8%) women (the main group before treatment – 22 (50,0%), the comparison group after treatment – 8 (17,8%), p<0,05).

Conclusions. The inclusion CO_2-laser in combination with local administration of estriol in the complex treatment of stress urinary incontinence can significantly reduce the manifestations of this complication, which is confirmed by a significant decrease in the median score from 55 to 18 in women of the main group according to the results of the PFDI-20 questionnaire (p<0,05). The index of sexual function in women who received the proposed complex based on the results of the FSFI questionnaire experienced a significant increase from 25 to 46 points (p<0,05). The results of a survey

using the UDI-6 questionnaire indicate a significant reduction in the symptoms of stress urinary incontinence in women in the main group compared to women who received only local estriol therapy.

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