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INFLUENCE OF ADVERSE LIFESTYLE FACTORS ON A WOMAN'S BODY

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Summary. In women with unfavorable lifestyle factors, there is a decrease in the contractility of the obturator muscle of the lower third of the vagina in the first degree in terms of the strength of tonic, maximal, volitional contractions and their duration. Elimination of these factors will prevent the formation of incompetent pelvic floor muscles after childbirth through the natural birth canal.

Key words: pelvic organ prolapse, failure of the pelvic floor muscles.

Relevance. Pelvic organ prolapse (POP), like a "hidden epidemic," is widespread and is observed in 30-50% of women of reproductive age in the absence of clinical manifestations for a long time, reaching more than 70% in patients after menopause [Artymuk, N.V. et al., 2018; Apolikhina, I.A., 2019; Barber, M.D. et al., 2013]. Being a multifactorial disease, POP causes various dysfunctions of the pelvic organs, which is accompanied by physical and social restrictions [Krasnopolskaya, I.V., 2018; Feng F. et al., 2020; Sliwa J. et al., 2020]. According to foreign authors, POP is a pathology that has an adverse effect on the body to a greater extent than coronary heart disease and diabetes mellitus, significantly reducing the quality of life and sometimes leading to complete social isolation of patients [Huemer H., 2019; Fleischer K., 2020].

Increasing life expectancy and social activity of women dictates the need to improve their quality of life. At the same time, the period of development of POP to clinically pronounced stages lasts 10-15 years, when preventive and conservative therapeutic interventions are possible, but patients seek medical help mainly when the only treatment option is surgery [Apolikhina I.A. et al., 2019; Maher C.F. et al., 2020; Burkhart R. et al., 2021]. According to domestic authors, in the structure of indications for surgical intervention, PTO ranks third after benign tumors and endometriosis [Sukhikh S.O. et al., 2018; Gustovarova T.A. et al., 2021], while at least a third of patients subsequently experience relapses of the disease, which determines not only the medical significance of this problem, but also the social one. In this regard, solving the issues of preventing POP in women is one of the urgent tasks of modern gynecology [Milyaeva N.M. et al., 2021]. The reserves for reducing

the incidence of POP and its complications are prediction, preclinical diagnosis, previously conservative and/or timely surgical treatment and rehabilitation.

Current technologies for identifying patients with an increased risk of developing POP in most cases are simplified lists of individual risk factors (RFs), such as connective tissue dysplasia (CTD) and family history [Wen L. et al., 2019; Chen J. et al., 2020; Pang H. et al., 2021]. According to this technology, people with risk factors must follow special precautions, for example, lifestyle changes (avoid heavy physical activity and physical inactivity, eat right) and undergo regular screening to identify the initial stages of POP. However, these measures do not have evidence of effectiveness and cannot be considered sufficient, and screening programs have not been developed.

Currently, there are models for predicting the risk of developing certain diseases, which are created on the basis of epidemiological studies, taking into account environmental, phenotypic and genotypic variables, so they can be used to fairly accurately calculate the risk for a particular person. Identification of molecular defects in hereditary and sporadic diseases allows us to significantly expand the existing understanding of the trigger mechanisms in their pathogenesis, develop and implement fundamentally new approaches to identifying risk factors and preventing diseases based on the development of an individual “genetic passport” [Toktar L.R. et al., 2021]. These developments can serve as prerequisites for the creation of programs for TVET.

Today, there are more than a dozen models for predicting the risk of developing VET in the world, and many of them are not without drawbacks. Most of them depend in part on risk factors that can only be determined during an examination by an obstetrician-gynecologist, and they are not intended for use in the early stages of medical care, when it is most important to assess the risk of the disease before the manifestation of clinical manifestations.

In connection with the above, expanding the understanding of the pathogenesis of POP, more accurate identification of risk groups and prognosis, as well as early preclinical diagnosis of POP and the development of targeted preventive measures are of great importance, which determines the relevance of this study.

The purpose of the study is to improve preventive and treatment strategies for pelvic organ prolapse at preclinical and early stages for patients of various age groups based on the development of a computer program for assessing risk factors.

Material and methods. The study was carried out on the basis of the gynecology department of the perinatal center and in the Carmen and Lorastom clinics of the Bukhara region from September 2017 to July 2023. According to the purpose of the study, 66 patients from 25 to 82 years old with a history of 1 to 7 births suffering from various forms of prolapse. There were no isolated forms of anterior PTO in the studied cohort. All patients were examined by general clinical methods, with special attention paid to studying the condition of the pelvic floor. All patients were assessed for general and gynecological status using bimanual, manometric (perineometry), sonographic examination and vaginal palpation with determination of perineal muscle strength according to the Oxford scale.

Results. The socio-clinical portrait of patients with grade III–IV VET is characterized by an average age of 51.5 (5.8) years, specialized secondary education (59.0%), living in rural areas (63.9%) and heavy physical labor (68 .1%), absence of a family history of POP (62.1%), average age at menarche (74.0%), postmenopausal period (87.0%), duration of menopause less than 11 years (71.0%), the presence of 2 or more births (86.0%), late average age of birth of the first child (over 26 years old - 50.9%), high frequency of obstetric injuries (99.0%), absence of clinical signs of systemic CTD (55.0%), overweight and obesity (59.9%), high frequency of gynecological and somatic diseases in history, dysfunction of the urinary system, rectum, and sexual function.

A comparison between patients with POP and conditionally healthy women demonstrated the presence of a number of socio-demographic and clinical-anamnestic factors that can be considered as risk factors for the development of POP. Among them were age 56 years and older (relative risk 2.51; 95% confidence interval 2.12–2.97), secondary education (1.48; 1.12–1.96), living in rural areas (1. 68; 1.45–1.95) and heavy physical labor (1.84; 1.59–2.14), family history of POP and hernias (1.83; 1.07–3.14), early (2 .25; 1.25–4.06) and late age at menarche (2.85; 1.92–4.25), hypoponizing menstrual cycle (5.03; 3.50–8.09), heavy (1 .95; 1.58–2.42) and long menstruation (12.0; 1.31–3.11), duration of menopause 11 years or more (4.56; 3.06–6.78), older age birth of the first child (2.17; 1.22–3.85), 3 or more births (1.42; 1.03–1.94), venous complications and hemorrhoids during pregnancy (7.26; 4.56 –11.48), acute urinary retention after childbirth (12.40; 2.96–52.0) and obstetric trauma (2.25; 2.01–2.52), fetal weight at birth above 3500 g (1 .88; 1.48–2.38), underweight (3.45; 1.54–7.28) and grade III obesity (2.36; 1.04–5.32), the presence of connective tissue dysplasia (flat feet – 16.9; 9.43–30.32),

presence of urinary disorders (difficulty urinating – 16.62; 6.12–45.13; stress incontinence – 5.52; 3.30–9.22), defecation (47. 63; 23.99–94.54) and sexual function (pain during sexual intercourse – 8.26; 4.56–15.14).

Other researchers indicate older age, high parity and high BMI as risk factors as being strongly, significantly and independently associated with each of the three sites of POP, with the exception of BMI and prolapse [2]. The odds for each type of symptomatic POP increase with age and multiple vaginal births [1,2]. RFs also include symptoms of bladder prolapse during pregnancy, the presence of POP in the mother and heavy physical work [1], living in rural areas and being over 40 or 55 years old [3], heavy lifting, chronic cough and chronic constipation [4] , which coincides with the results of the present study.

Analysis of nMFR showed that the majority of patients were postmenopausal (73.2%), had a family history of POP with a maximum frequency in age group Ia (85.7%), 65.4% of patients with POP had clinical signs of systemic moderate DTD and severe degree with maximum implementation of this risk factor at the age of perimenopause.

In the structure of gynecological diseases, non-inflammatory diseases of the female genital organs (N80–N98), including POP, were most often observed; in group Ib, disorders in the perimenopausal period predominated (40.0%), in group Ic - postmenopausal atrophic vaginitis (100.0%). Inflammatory diseases of the vagina and vulva occurred in 71.4, 72.5 and 68.8% of patients, respectively.

The total number of all somatic diseases was 8.9 (SD 1.3) cases per patient, the largest number of combinations was identified in group Ib - 10.8 (SD 1.0) cases. Noteworthy is the high frequency of diseases indicating the presence of DTD in all groups.

Complications of labor and delivery averaged 1.38 (SD 0.05) cases per patient. Venous complications and hemorrhoids during pregnancy were more often observed in women of perimenopausal age (60.0%), nutrition-related anemia - in women of reproductive age (53.5%). Every third patient had perineal ruptures during delivery with a maximum rate in group Ia (39.2%), acute urinary retention - also in group Ia (14.2%), in others - 2 times less.

Births weighing more than 3500 g accounted for about half of the births - this figure was 64.3% in group Ia, 50.0% in group Ib, and 45.7% in group Ic.

In all age groups of patients, symptoms of functional bladder disorders were noted, the most common of which were pollakiuria (71.6%), urgency (70.0%) and

obstructive urination with a feeling of incomplete emptying of the bladder (67.7%) with the maximum number of disorders in the reproductive age group (3.0 (SD 0.03) cases per patient) and severe urinary disorders, which did not have a statistically significant difference depending on the age group.

Conclusion. Sociodemographic and clinical anamnestic features of patients suffering from pelvic organ prolapse are characterized by an average age of 51.5 (5.8) years, secondary specialized education (59.0%), living in rural areas (63.9%) and occupation heavy physical labor (68.1%), absence of a family history (62.1%), average age at menarche (74.0%), postmenopausal period (87.0%), menopause duration less than 11 years (71.0 %), the presence of 2 or more births in history (86.0%), late average age of birth of the first child (over 26 years old - 50.9%), high frequency of obstetric injuries (99.0%), absence of systemic DST (55 .0%), overweight and obesity (59.9%), high frequency of gynecological and somatic diseases in the anamnesis.

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