PREDICTIVE VALUE OF CLINICAL AND ANAMNESTIC RISK FACTORS FOR THE DEVELOPMENT OF HIGH GRADES OF GENITAL PROPOSITION IN WOMEN

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ABSTRACT

Genital prolapse is a common disease in women with a multifactorial etiology. Pelvic floor dysfunction is likely contributed by the combinations of anatomical, physiological, genetic, lifestyle, and reproductive factors that interact throughout a woman's life.

To assess the predictive value of the trigger factors for the development of genital prolapse about the formation of a high degree and severe course of genital prolapse in women.

We studied 102 patients with violations of the architectonics of the pelvic organs. The exclusion criteria were pregnant and nulliparous women under 30 years of age. All patients underwent an assessment of the degree of genital prolapse using the international classifications POP-Q (Pelvic Organ Prolapse Quantification). The severity of manifestations of genital prolapse was assessed using the PFDI-20 questionnaire.

The mean age of the study sample was 47.5 ± 13.6 years. According to logistic regression analysis, independent predictors of risk for the formation of a high degree and severe clinical course of genital prolapse in women are an increased body mass index, constipation, chronic lung disease, pelvic inflammatory disease, frequent labor, and delivery of large fetuses. Thus, timely identification and elimination of the most significant trigger risk factors for the development of genital prolapse in women will serve to predict and prevent a high degree and severe clinical and functional course of pelvic organ prolapse.

A history of chronic constipation and obstructive pulmonary diseases, inflammatory processes of the pelvic organs, frequent childbirth, childbirth with a large fetus, and the body mass index of women were independent perdictory risk factors for the development of a high degree and severe clinical and functional course of pelvic organ prolapse in women.

KEYWORDS: genital prolapse, risk factors, POP-Q, PFDI-20.

INTRODUCTION

Genital prolapse (PG) in women is a common disease with a multifactorial etiology [1]. It is likely that combinations of anatomical, physiological, genetic, lifestyle, and reproductive factors interact throughout a woman's life and contribute to pelvic floor dysfunction [2]. The factors causing the development of PG vary from patient to patient [5]. Uncovering the complex causal network of genetic factors, birth trauma, lifestyle and concomitant diseases are challenging [2].

The polyetiology of pelvic organ prolapse, and many ambiguous theories of the pathogenesis and causal factors of the development of genital prolapse dictate the need for a targeted search for predictor clinical and anamnestic risk factors (trigger factors) as predicting the formation of high gradations of genital prolapse in women.

Purpose of the study. Multifactorial assessment of the prognostic value of clinical and anamnestic risk factors for the development of high grades of genital prolapse in women.

MATERIALS AND METHODS

The study involved 102 patients with disorders of the architectonics of the pelvic organs, whose age was 47.2 ± 13.6 years. The exclusion criteria were pregnant and

nulliparous women under 30 years of age. All patients underwent an assessment of the degree of genital prolapse using the international classifications POP-Q (Pelvic Organ Prolapse Quantification) [4]. To detail the severity of manifestations of internal genital prolapse before and after treatment, the PFDI-20 questionnaire was used, which contains three groups of questions. The first group (POPDI-6) includes questions concerning the symptoms of pelvic organ prolapse, the second group (CRAD-8) allows you to assess the degree of colorectal-anal disorders, and the last, third group (UDI-6) involves obtaining characteristics of symptoms of urinary incontinence [3].

Spearman's rank correlation coefficient was calculated to statistically describe the relationship between various parameters. Intergroup comparisons were made using univariate analysis for all potential risk factors. Multivariate logistic regression analysis was then performed for all variables that were significant in univariate analysis to identify independent risk factors for PG. The significance of the differences was checked using the Student's t-test, where the level of statistical significance was considered to be p<0.05.

RESULTS AND DISCUSSION
After assessing the degree of internal genital prolapse using the international classifications POP-Q, the studied patients were divided into two groups, depending on the

degree of genital prolapse: group I included patients with grade 1–2 prolapse (n = 54) and group II consisted of patients with 3-4 degree of genital prolapse (n = 48).

According to the results of the study, there was no significant difference in age between groups I and II, 46.3 ± 12.8 and 47.8 ± 13.4, respectively (p = 0.45). However, socio-demographic factors such as body mass index (BMI) (women in group II were more obese than women in the group I, p = 0.004), a sedentary lifestyle (56% of women in group II had physical inactivity versus 28% of women in the group I). group) and education (9% of women in group II were with higher education, compared with 20% of women in the group I, p = 0.009), as well as the presence of chronic diseases in women: obstructive pulmonary disease (p = 0.0001), diabetes mellitus (p = 0.047) and constipation (p = 0.0001) were associated with a high degree of genital prolapse according to POP-Q and a severe clinical course of pelvic organ prolapse in women according to PFDI-20. Evaluation of obstetric history data found that parity (p = 0.7) and a previous planned (p = 0.3) or emergency (p = 0.6) cesarean section in history did not affect the degree and severity of manifestations of genital prolapse, while the presence of an inflammatory process of the pelvic organs (p = 0.001), frequent childbirth (p = 0.01) and childbirth with a large fetus (p = 0.005) significantly increased the degree and severity of the clinical course of pelvic organ prolapse.

Table 1

Multivariate logistic regression analysis of risk factors for high PG in women.

Trigger factors	Relationship of chances	Confidence interval (95%)	Significance level
BMI	1.1	1.0-1.1	0.046
Constipation	4.1	2.3-7.3	0.0001
Chronic pulmonary disease	2.9	1.6-5.5	0.001
Inflammatory process of the pelvic organs	1.7	1.2-2.3	0.001
Frequent childbirth	2.5	1.4-2.8	0.002
Childbirth with a large fetus	1.7	1.1-2.5	0.016

Although several trigger factors were significantly associated with a high degree of prolapse in univariate analysis, multivariate logistic regression of these factors (BMI, educational level, nature of occupation, the presence of chronic pulmonary diseases, constipation, diabetes mellitus, pelvic inflammatory disease), frequent childbirth and birth of a large fetus in history) showed

that there are only a few independent risk factors (Table 1). These include obesity, constipation, chronic lung disease, pelvic inflammatory disease, frequent childbirth, and large fetuses.

CONCLUSION

The studies have shown the ambiguity of the influence of the main risk factors in the occurrence of high gradations of pelvic floor failure in the examined women. Thus, the presence of provoking risk factors for the development of pelvic floor failure (repeated vaginal delivery, obstetric trauma, vaginal delivery with a large fetus) and decompensating risk factors (advanced age and duration of menopause) is ambiguously manifested in patients, depending on the degree of genital prolapse according to POP-Q, more often has an isolated significance in patients who are diagnosed with late degrees of development of the process. Thus, a history of chronic constipation and obstructive pulmonary diseases, inflammatory processes of the pelvic organs, frequent childbirth, childbirth with a large fetus, and the body mass index of women were independent perdictory risk factors for the development of a high degree and severe clinical and functional course of pelvic organ prolapse in women.

REFERENCES:

1.	Dietz HP. The aetiology of prolapse. Int Urogynecol J Pelvic Floor Dysfunct. 2008;19(10):1323–1329. doi: 10.1007/s00192-008-0695-7.

2.	Delancey JO, Kane Low L, Miller JM, Patel DA, Tumbarello JA (2008) Graphic integration of causal factors of pelvic floor disorders: an integrated life span model. Am J ObstetGynecol 199(6):610 e611–615. doi:10.1016/j.ajog.2008.04.001.

3.	Henn EW, Richter BW, Marokane MMP. Validation of the PFDI-20 and PFIQ-7 quality of life questionnaires. Int Urogynecol J. 2017;28(12):1883–90.

4.	Kim, S.R., Suh, D.H. & Jeon, M.J. Current use of the pelvic organ prolapse quantification system in clinical practice among Korean obstetrician-gynecologists. BMC Women's Health 21, 207 (2021). https://doi.org/10.1186/s12905-021-01354-w.

5.	Schaffer JI, Wai CY, Boreham MK. Etiology of pelvic organ prolapse. Clin Obstet Gynecol. 2005;48(3):639–647. doi: 10.1097/01.grf.0000170428.45819.4e.