



CHANGES IN THE LEVEL OF OXYPROLINE IN WOMEN OF REPRODUCTIVE AGE WITH PROLAPSE OF THE GENITALS

Saijalilova Dilnoza
Urinova Rozagul

Tashkent Medical Academy.

Article history:	Abstract:
Received: January 8 th 2023 Accepted: February 4 th 2023 Published: March 7 th 2023	83 women of reproductive age were examined, of which 63 women had genital prolapse. In 57.1% of women with PH, nCTD was detected. The severity of PG depended on the severity of UCTD. The study of the level of hydroxyproline in the urine revealed in most women with PH its increased excretion, which reflected an enhanced process of collagen catabolism. At present, the theory of systemic connective tissue dysplasia as the leading cause of prolapses has become widespread.

Keywords: Genital prolapse, connective tissue dysplasia, hydroxyproline

UCTD is an anomaly of the tissue structure and is a systemic pathology, it would be logical to assume that the pelvic floor muscles cannot but respond to it with their characteristics. T.Yu. Smolnova et al. [4, 5] believe that the prolapse and complete prolapse of the internal genital organs in women is one of the manifestations of NDST at the level of the reproductive organs. Hydroxyproline is one of the main amino acids in collagen. The need for a biochemical study of the metabolism of the structural components of the connective tissue as an assessment of the state of the pelvic floor muscles is obvious. All this became the subject of our research.

Genital prolapse (PG) is about 25-30% in the structure of gynecological diseases, while about 1/3 of all patients are women of reproductive age. It has now been proven that the cause of genital prolapse in young women in most cases are connective tissue diseases, namely, undifferentiated connective tissue dysplasia (UCTD). In this regard, it is of interest to determine the level of the connective tissue metabolite oxyproline in PH.

PURPOSE OF THE STUDY: to study the level of hydroxyproline in women with genital prolapse in uCTD.

MATERIAL AND RESEARCH METHODS. 83 women of reproductive age were examined, of which 63 women had PH (main group). The remaining 20 women without PG made up the comparison group. According to the severity of PG, the women were divided into 3 subgroups: 1 A subgroup consisted of 29 women with I degree of prolapse; 1 The subgroup consisted of 23 women with II degree of genital prolapse and 1 C subgroup consisted of 11 women with severe degree. The average age of women in the main group was 26.4 ± 2.2 years, in the comparison

group - 24.5 ± 0.6 years. The presence of UCTD in the studied women was determined when they had 8 clinical signs of UCTD. Patients were examined for the level of hydroxyproline in the urine, one of the main amino acids of collagen.

RESEARCH RESULTS. In the group of women with genital prolapse, UCTD was detected in 36 women, which was 57.1%, and in the group of women without PG, this figure was 8.7%, which is 6.6 times less. In women with a mild degree of genital prolapse, UCTD occurred in 37.9%, with grade 2 PH - in 60.9% of women. In women with severe PH in 100%, nDST. From this it follows that the severity of the development of PH depends on the severity of uCTD, and the more pronounced signs of uCTD, the more severe the form of PH in women of reproductive age. The study of the level of hydroxyproline in the urine revealed in most women with PH its increased excretion, which reflected an enhanced process of collagen catabolism. In more than half (69.4%) of women, the excretion of OP was significant and exceeded the due value by more than 2 times. In almost a third (30.6%) of patients, the increase in this indicator was moderate and averaged 76.1 ± 1.9 mg/day. In the group of women with a mild degree of genital prolapse, uCTD occurred in 37.9% and was represented in almost equal amounts by mild (20.7%) and moderate (17.2%) degrees. There were no women with severe UCTD in this group. The reverse trend was observed in group 1C women with severe genital prolapse. In 100% of women with severe genital prolapse, UCTD was noted with a predominance of severe (72.4%). In the group of women with grade 2 genital prolapse, UCTD occurred in 60.9% of women, among whom moderate UCTD prevailed (39.1%), while mild and severe UCTD was 3 and 4.5 times less, respectively.



The foregoing allows us to conclude that the severity of the development of genital prolapse depends on the severity of uCTD, and the more pronounced the signs of uCTD, the more severe the form of genital prolapse in women of reproductive age.

To confirm uCTD, all patients underwent a study of the level of daily excretion of hydroxyproline in the urine. The highest values of OP excretion were observed in women with a pronounced degree of PH (255.08 ± 11.28 mg/day).

CONCLUSION: It has been established that UCST determines the features of the development of the pelvic floor and affects the formation of PG. The relationship between the severity of PG in women and the severity of UCTD was revealed, which is confirmed by increased excretion of OP in daily urine. An increase in the level of hydroxyproline in the urine, and early detection of its violations can form the basis for the prevention of the formation and progression of genital prolapse in reproductive age.

CONCLUSIONS:

1. We found that UCTD determines the features of the development of pelvic floor pathology and affects the formation of genital prolapse.
2. Understanding the features of connective tissue metabolism, namely, an increase in the level of hydroxyproline in the urine, and early detection of its disorders can form the basis for preventing the formation and progression of genital prolapse in reproductive age.

CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

FINANCIAL SUPPORT

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ACKNOWLEDGMENTS

All authors participated in the research process and data collection.

LITERATURE:

1. Kerimkulova N.V., Nikiforova N.V., Gromova O.A., Torshipi, Yu. "A method for predicting the presence of undifferentiated connective tissue dysplasia in pregnant women" // Patent No. 2539996 dated 12/11/2014.

2. Krasnopolskaya I.V. Pelvic floor dysfunction in women: clinic, diagnosis, principles of treatment. // *Obstetrics and gynecology*. 2018; No. 2. pp. 82-86.
3. Krasnopolskaya I.V. Urination disorders in women with pelvic floor dysfunction.// *Obstetrics and gynecology: news, opinions, training*. 2018; 1:62-7.
4. Smolnova T.Yu. Genital prolapse and connective tissue dysplasia. // *Clinical and experimental surgery*. 2015; 2:53-65.
5. Smolnova T.Yu., Chuprynin V.D. Genital prolapse: a look at the problem//*Obstetrics and gynecology*. 2018, No. 10. pp.33-40.
6. Touza K.K., Rand K.L., Carpenter J.S., Chen C.X., Heit M.H. A scoping study of psychosocial factors in women with and/or treated for pelvic organ prolapse. // *Female Pelvic Med. Reconstr. Surg.* 2018; March 5.
7. Barber M.D., Maher C. Epidemiology and outcome assessment of pelvic organ prolapse // *Int. Urogynecol. J.* 2013; 24(11): 1783-90.