URINATION DISORDERS IN PREGNANT WOMEN

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Abstract. *Pregnancy is manifested by a host of changes in a woman's body, and changes in the urinary system are no exception. But the line between normality and pathology still remains; the vast majority of authors directly or indirectly associate the development of urination disorders in reproductive age with pregnancy and childbirth. Therefore, the purpose of the study was to examine the frequency and nature of urinary disorders during pregnancy to identify significant risk factors. Pregnant women who applied to the multidisciplinary clinic of SamSMU with urinary disorders in 2022-2023 were examined.*

Keywords: *urinary dysfunction, urinary incontinence, pregnancy, reproductive age, body mass index (BMI), overactive bladder (OAB).*

Relevance. According to Prospective Urinary, up to 30% of women of reproductive age suffer from various types of urinary disorders, which significantly reduce the quality of life (Incontinence Research - PUIR, 2006). In the vast majority of cases, urinary disorders are associated with pregnancy and childbirth [9, 11, 16]. When surveyed using the King's Health Questionnaire, 54% of women with UI in the third trimester of pregnancy reported a negative impact of symptoms on quality of life. In a study by G. Ro1 et al. There was a statistically significant increase in depressive symptoms in pregnant women with urgent UI at 36 weeks of pregnancy [1, 7, 19].

The basis of overactive bladder syndrome (OAB) is detrusor overactivity, a urodynamic concept that refers to involuntary spontaneous or provoked contractions of the detrusor during the filling phase. Currently, there are two main forms of detrusor overactivity: neurogenic and idiopathic [5, 13]. Neurogenic causes of OAB development involve impaired innervation of the bladder due to neurological diseases and injuries. There are supraspinal lesions (Parkinson's disease, multiple sclerosis, Alzheimer's disease, stroke, etc.) and suprasacral lesions (osteochondrosis, spinal spondyloarthrosis, Schmorl's hernia, myelomeningocele, etc.). Risk factors for idiopathic (non-neurogenic) detrusor overactivity include age-related changes, bladder outlet obstruction, myogenic and anatomical changes in the vesicourethral segment, as well as sensory impairment.

Purpose of work: study the frequency and nature of urinary disorders during pregnancy to determine significant risk factors.

Materials and methods: The patients were examined at the multidisciplinary clinic of SamSMU at the Department of Obstetrics and Gynecology 1. In total, 418 pregnant women who complained of urinary disorders in 2022 took part in the study. The control group consisted of 50 healthy pregnant women.

During the study, the following examination methods were used: collection of complaints and anamnesis, general clinical examination methods (general blood count, general urinalysis,

biochemical blood test, coagulogram), ultrasound examination of the condition of the fetus and urinary organs.

The age of the patients ranged from 23 to 39 years, the average age was 28.2±2.38 years.

All received materials were subjected to automated statistical processing. Variation-statistical processing of the research results was carried out using the “Statistics 6.0” program, determining the main indicators of variation: average values (M), average errors (m), standard deviation (p).

The reliability of the results obtained was determined using the Student's test. The difference between two means is considered significant if the p-parameter is less than 0.05. The confidence level was at least 95%.

Results: It was found that the majority (47.4%) of pregnant women with urinary disorders were aged from 30 to 34 years; 34.4% of patients are from 25 to 29 years old; 11.5% of patients are from 18 to 24 years old; the share of other age groups accounted for no more than 5%. 27.9% of women had normal body weight, 38.4% of patients had overweight, 28.7% had stage I obesity. In the group of women with stressful and mixed UI, the average BMI values were higher than in the control group ($p < 0.02$). It was established that there was an increased risk of urinary disorders in the group of women with a BMI value of more than 25 kg/m2, CI = 1.15 (95% CI 1.05-1.30; $p < 0.05$). When assessing the obstetric history, the number of previous pregnancies and their outcome were revealed. It was found that 62.6% of women in the study group had a history of one to seven pregnancies (average 1.9 ± 1.33). According to the number of pregnancies, the group was distributed as follows: 33.9% of patients had a second pregnancy, 20.7% of women had a history of 2 to 3 pregnancies, 8.0% of women had more than 3 pregnancies.

It was found that 31.4% of women with urinary disorders had a history of 1 to 4 vaginal births (average 0.9 ± 0.52). Of these, 25.3% of women had one birth, 39% had two births, and 35.7% had three or more births. 10.2% of patients had a history of cesarean section (mean number of cesarean sections 0.5 ± 0.34). 28.4% of patients indicated a history of artificial termination of pregnancy in the early stages, 20.3% of women had a history of one to three spontaneous miscarriages.

In women with urinary disorders, the weight of newborns in previous births ranged from 1680 g to 5300 g (average weight 3346.3 ± 162.1 g). In 30.5% of patients, the weight of the newborn was more than 4000 g, while in 100% of cases the birth was carried out through the vaginal birth canal with dissection of the perineum.

In patients with mixed UI, the average weight of the newborn, when compared with the control group, was significantly higher: 3544 ± 121.3 g and 3173 ± 97.6 g, respectively ($p < 0.01$).

The number of pregnant women (9%) with various types of urinary disorders, having symptoms even before real pregnancy, was higher than in the control group ($p < 0.001$). However, only two patients received conservative therapy for urgent urinary incontinence with a positive effect before this pregnancy. A statistically significant risk of manifestation of urinary disorders during pregnancy in women who had symptoms before this pregnancy was established, RR = 1.74 (95% CI 1.12 - 1.94; $p < 0.001$). All patients who suffered from urinary problems before this pregnancy noted a worsening of symptoms during pregnancy. Using correlation analysis, a direct moderate relationship was revealed between the presence of symptoms of urinary disorders before and during this pregnancy ($r = 0.32$; $p < 0.05$).

Conclusions. Summarizing the data obtained, the leading risk factors for all types of urinary disorders during pregnancy are: their existence before the present pregnancy (AR = 1.74; 95% CI 1.12 - 1.94; p < 0.001); age of patients over 35 years (AR = 1.41; 95% CI 1.36 - 4.54; p < 0.05); presence of a history of pregnancy (AR = 1.27; 95% CI 1.16 - 1.56; p < 0.002) and a BMI value > 25 kg/m2 (AR = 1.15; 95% CI. 1.05-1.30; p < 0.05). For stressful and mixed UI, a specific risk factor is a greater number of births through the birth canal, for mixed UI - a relatively large weight of the newborn (increase by 11.7%) in previous births, compared to the control group (AR = 1.38; 95 % CI 1.02 - 1.85; p < 0.01).

REFERENCES

1. АСКАРОВА Ф. К. SERVITSITLAR VA HOMILADORLIK //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7. – №. 5.
2. Тоджиева Н.И., Худоярова Д.Р., Базарова З.З. Совершенствование методов лечения гиперпластических процессов эндометрия в пременопаузе-Профессионал года. 2018. 81-84с
3. ХАСАНОВА Д. А. АУТОИММУННЫЙ ТИРЕОИДИТ: БЕРЕМЕННОСТЬ И РОДЫ //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7. – №. 5.
4. Хасанова Д. ПРОБЛЕМА НЕ ВЫНАШИВАНИЯ БЕРЕМЕННОСТИ //Евразийский журнал медицинских и естественных наук. – 2023. – Т. 3. – №. 2. – С. 175-179.
5. Худоярова Д., Маманазарова З., Тилявова С. ДИАГНОСТИЧЕСКАЯ ЦЕННОСТЬ УЛТРАЗВУКОВОГО МЕТОДА У БЕРЕМЕННЫХ ПРИ ЭКСТРАГЕНИТАЛЬНЫХ ПАТОЛОГИЯХ //Естественные науки в современном мире: теоретические и практические исследования. – 2022. – Т. 1. – №. 26. – С. 33-36.
6. Тилявова С. и др. Акушерские аспекты нарушений мочеиспускания у женщин //Журнал проблемы биологии и медицины. – 2015. – №. 4, 1 (85). – С. 173-175.
7. Шопулотова З. А., Зубайдиллоева З. Х. ПЕРИНАТАЛЬНАЯ НЕФРОЛОГИЯ: ПРОФИЛАКТИКА ОСЛОЖНЕНИЙ У БЕРЕМЕННЫХ С ХРОНИЧЕСКИМ ПИЕЛОНЕФРИТОМ //Центральноазиатский журнал образования и инноваций. – 2023. – Т. 2. – №. 9. – С. 79-82.
8. Abdukhamidovna K. D. MANAGEMENT OF PREGNANT WOMEN WITH IDIOPATIC THROMBOCYTOPENIC PURPLE //European International Journal of Multidisciplinary Research and Management Studies. – 2023. – Т. 3. – №. 02. – С. 16-21.
9. Askarova F. K. The Negative Impact of Vitamin D and Other Micronutrient Deficiencies in Pregnant Women //Central Asian Journal of Medical and Natural Science. – 2021. – Т. 2. – №. 6. – С. 380-382.
10. Iskandarovna T. N., Rakhimovna K. D. Risk factors for the development of endometrial hyperplastic processes in premenopause //Биомедицина ва амалиёт журнали. – с. 72.
11. Hasanova D. The governor is a woman who lives with the pain of the people //Texas Journal of Multidisciplinary Studies. – 2021. – Т. 3. – С. 57-58.
12. Amirzoda T. S., Rakhimovna K. D. PHYSIOTHERAPEUTIC TREATMENT METHODS AND URINARY INCONTINENCE //International Journal of Medical Sciences And Clinical Research. – 2023. – Т. 3. – №. 02. – С. 05-12.

13. Kudratovna A. F. REALITIES OF THE TIME: IDIOPATHIC THROMBOCYTOPENIC PURPLE AND PREGNANCY //World Bulletin of Public Health. – 2022. – T. 11. – C. 22-24.
14. Khasanova D. PREMENSTRUAL SYNDROME IN THE MODERN SCIENCE //International Bulletin of Medical Sciences and Clinical Research. – 2022. – T. 2. – №. 12. – C. 16-22.
15. Khasanova D. A. Morphological Peculiarities Of The Spleen In Normality And With The Influence Of A Gene-Modified Product In Experiment //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – T. 3. – №. 04. – C. 26-30.
16. Khasanova D. A. HISTOLOGICAL STRUCTURE OF THE RAT SPLEEN IN EARLY POSTNATAL ONTOGENESIS //Art of Medicine. International Medical Scientific Journal. – 2021. – T. 1. – №. 2.
17. Todjieva N. I., ugli Shopulotov s. a. communication of pre-clampsia of severe degree and extrogenital diseases //Биомедицина ва амалиёт журнали. – с. 77.
18. Shopulotova Z. A., Zubaydilloeva Z. K., Khudoyarova D. R. COMORBID EVENTS IN PREGNANT WOMEN WITH PYELONEPHRITIS AND PREVENTION OF THESE CONDITIONS //Бюллетень педагогов нового Узбекистана. – 2023. – T. 1. – №. 9. – C. 35-38.
19. Shopulotova Z. A., Zubaydilloeva Z. K. THE VALUE OF ULTRASOUND DIAGNOSTICS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //Бюллетень студентов нового Узбекистана. – 2023. – T. 1. – №. 9. – C. 19-22.
20. Shopulotova Z. COMPARATIVE ANALYSIS OF CLINICAL CASES OF EXACERBATION OF CHRONIC PYELONEPHRITIS IN PREGNANT WOMEN //International Bulletin of Medical Sciences and Clinical Research. – 2023. – T. 3. – №. 8. – C. 22-25.