



## THE VALUE OF ULTRASOUND DIAGNOSTICS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS

Z.A.Shopulotova

Ass.

Z.Kh.Zubaydilloeva

student

Samarkand State Medical University, Samarkand, Uzbekistan

### ARTICLE INFO

Qabul qilindi: 04-September 2023 yil

Ma'qullandi: 08-September 2023 yil

Nashr qilindi: 13-September 2023 yil

### KEY WORDS

*chronic pyelonephritis, ultrasound, pregnancy, extragenital diseases, urinary outflow disorder.*

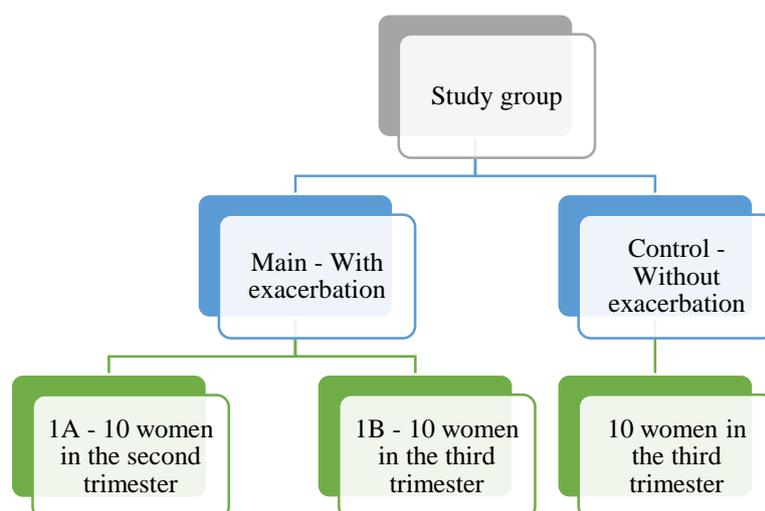
### ABSTRACT

*Pregnancy is a special state of the body when a woman is more fragile than ever and it is responsible for the life of her unborn child. But, unfortunately, during this period chronic extragenital pathologies may worsen. Kidney diseases are the second most common extragenital pathology after cardiac diseases, and often asymptomatic, first aggravating during pregnancy. Examination of a pregnant woman is limited to certain methods, that is, we exclude radiation examination methods, which reduces diagnostic possibilities. Ultrasound remains the most basic and convenient method, the capabilities of which have been expanded at the modern level.*

**Aim of the study:** Reveal the value of the ultrasound examination method for chronic pyelonephritis in pregnant women, to prevent exacerbation of the disease and perinatal outcomes.

**Materials and methods:** The study was conducted on the basis of the maternity complex and the radiology department of the multidisciplinary clinic №1 of SamSMU in 2022. The study included 30 pregnant women with chronic pyelonephritis who were divided into two groups depending on the course of chronic pyelonephritis. The patients underwent clinical and laboratory tests (general blood count, general urinalysis, bacterial culture of the flora, Zimnitsky and Nechiparenko test) and instrumental examination methods (ultrasound of the kidneys, Doppler ultrasound of the fetus).

**Results:** The examined women were divided into two groups: the main group - with exacerbation of chronic pyelonephritis (20 patients) and the control group - without exacerbation of chronic pyelonephritis (10 patients). In turn, the main group, consisting of pregnant women with chronic pyelonephritis who experienced an exacerbation of the disease, was divided into 2 subgroups depending on the timing of pregnancy: 1A group of 10 women with exacerbation of chronic pyelonephritis in the second trimester of pregnancy and 1B group of 10 women in the third trimester of pregnancy with exacerbation of chronic pyelonephritis. The distribution data of the survey groups is clearly shown in the following diagram.



According to ultrasound of the kidneys of women, echo signs of chronic pyelonephritis were observed in all patients in the form of expansion of the ventricular region, changes in the vascular pattern and echogenicity of the kidney structure. 43.3% (13) had signs of grade 1 hydronephrosis from the main group (1A and 1B). Microliths were detected in 30% (9), and salts were present in 63.3% (19) (distribution by group: 16.7%, 30%, 16.7%, respectively). In 23.3% (7) of the main group, stones were detected. In three patients from the main group 1B, urine outflow was impaired due to microliths and compression of the kidneys.

According to ultrasound examination of the fetuses of the examined women, uterine hypertonicity occurred in all women of the main group and 80% of women from the control group, oligohydramnios in 10% of women from 1A and the control group and in 40% of women from group 1B, polyhydramnios was present in 23.3% of women from the general sample, the homogeneity of amniotic fluid was impaired in 40%, fetal growth retardation was observed in 23.3%, dilatation of the lateral ventricles of the brain was observed in 10% of fetuses.

Taking into account the data obtained from the examination and observation of women, we can see that the data from patients with exacerbations in the 2nd trimester and the control group are comparable. But unlike group 1A, in the control group the general condition of the mother and fetus did not suffer, pregnancy and childbirth proceeded without complications. Which prompts us to think about predictors of exacerbation of the disease and risk factors.

Pregnant women, after registering, undergo a general urine test every month; if there are changes in the tests, we send them for an ultrasound of the kidneys already from the 16th week of pregnancy. If the ultrasound results are normal, she also continues to undergo a general urine test every month and is under observation at the clinic at her place of residence. If an ultrasound shows changes in the heart rate or the structure of the echogenic picture, we carry out preventive measures in the form of reducing the consumption of table salt, maintaining the correct water regime, warning women about the need to avoid hypothermia, observing the rules of personal hygiene, and the need to lead a healthy lifestyle, regularly conducting courses of restorative therapy: moderate physical activity, hardening, balanced nutrition, and be sure to include fruits, vegetables, and herbs in the diet; Periodically take multivitamins.

If, despite our methods of prevention, there are risk factors for exacerbation (hypothermia, large fetus, stones in the jaw, etc.) or the woman does not comply with the

prescribed prescriptions, we carry out symptomatic treatment to prevent exacerbation and generalization of the process.

**Conclusion:** Thus, based on the study data, we can say that ultrasound is indispensable and its indispensable advantage, especially for pregnant women.

Using the algorithm we have developed, it is possible to predict the possible risk of exacerbation of chronic pyelonephritis, which in turn ensures the prevention of complications of pregnancy and childbirth.

#### References:

1. Bragina T.V., Petrov Yu.A. CLINICAL AND PATHOGENETIC ASPECTS OF PREGNANCY AND THE CONDITION OF THE FETUS IN PATIENTS WITH CHRONIC PYELONEPHRITIS //Chief Doctor of the South of Russia. – 2021. – No. 2 (77). – pp. 53-56.
2. Bazarova Z. Z., Todzhieva N. I. SURGICAL MENOPAUSE AS A RESULT OF TREATMENT OF SEVERE OBSTETRIC COMPLICATIONS // FUNDAMENTAL AND APPLIED RESEARCH OF SCIENCE OF THE XXI CENTURY. STEP INTO THE FUTURE. – 2017. – pp. 53-55.
3. Zhantaybekova E.K. et al. Features of the course of pregnancy against the background of chronic pyelonephritis //Eurasian Scientific Association. – 2020. – No. 2-1. – pp. 53-57.
4. Ibragimov B.F. et al. New Trends in Optimizing the Complex Treatment of Infertility in Polycystic Ovarian Syndrome // Current Issues of Modern Medicine. – 2021. – P. 6-10.
5. Kobilova Z. A., Shopulotov Sh. A. USE OF GAMIFICATION AS AN INNOVATIVE METHOD OF TEACHING IN MEDICAL UNIVERSITIES // "CONCLUSIONS OF TEACHING" 16-18 SEPTEMBER 2021. – P. 377.
6. Todzhieva N.I., Khudoyarova D.R., Bazarova Z.Z. Improving methods for treating endometrial hyperplastic processes in premenopause // Professional of the Year. – 2018. – T. 2018. – P. 81-84.
7. Todzhieva N., Kurbaniyazova V. The effectiveness of the use of a prolonged regimen of combined oral contraceptives in the treatment of endometrial hyperplastic processes // Journal of Problems of Biology and Medicine. – 2016. – No. 4 (91). – pp. 93-96.
8. Tojiev Z. N., Ibragimov L. Z., Sabirova M. Sh. TERRITORIAL FEATURES OF SOCIO-ECOLOGICAL PROBLEMS IN THE LOCATION OF THE POPULATION OF UZBEKISTAN // Current problems of ecology and environmental management. – 2021. – pp. 127-135.
9. Khudoyarova D. R., Shopulotova Z. A. OPTIMIZATION OF MANAGEMENT OF PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //UZBEK MEDICAL JOURNAL. – 2022. – T. 3. – No. 3.
10. Khudoyarova D. R. et al. Diagnosis and early rehabilitation of infertility of tubal-peritoneal origin // Achievements of science and education. – 2020. – No. 8 (62). – pp. 62-64.
11. Khudoyarova D. R., Kobilova Z. A., Shopulotov Sh. A. Possibilities of an innovative teaching method - gamification // Ontological and sociocultural foundations of an alternative globalization project. - Yekaterinburg, 2021. - P. 361-364.
12. Khudoyarova D. R., Kobilova Z. A., Shopulotov Sh. A. IMPROVEMENT OF METHODS OF NATURAL FERTILITY RESTORATION IN WOMEN WITH INFERTILITY CAUSED BY ENDOMETRIOSIS //Health, demography, ecology of the Finno-Ugric peoples. – 2020. – No. 4. – pp. 53-55.

13. Shavkatova A., Shopulotova Z., Khudoyarova D. Effect of ozone therapy on fetoplacental insufficiency // Journal of hepato-gastroenterological studies. – 2021. – T. 2. – No. 3.2. – pp. 63-66.
14. Shavkatova G. S., Xudoyarova D. R., Shopulotova Z. A. METABOLIK SYNDROM-ZAMONAVIY JAMIYATNING MUAMMOSI //Eurasian Journal of Academic Research. – 2022. – T. 2. – No. 3. – pp. 486-491.
15. Doniyorovna K. D. et al. AUTOIMMUNE THYROIDITIS AND IODINE DEFICIENCY //ResearchJet Journal of Analysis and Inventions. – 2022. – T. 3. – No. 7. – pp. 1-6.
16. Khudoyarova D. S. D. R., Tilavova S. A., Shopulotova Z. A. MANIFESTATIONS OF EXAMINATION OF CHRONIC PYELONEPHRITIS IN PREGNANT WOMEN (CLINICAL CASE) // Thematics Journal of Microbiology. – 2022. – T. 6. – No. 1.
17. Khudoyarova, D. R., et al. "Fertility recovery from polycystic ovarian syndrome." International journal of pharmaceutical research (+ Scopus) ISSN: 0975-2366.
18. KHUDOYAROVA D. R. et al. ASSESSING THE QUALITY OF WOMEN'S LIFE OF REPRODUCTIVE AGE WITH SURGICAL MENOPAUSE //BIOMEDICINE VA AMALIOT JOURNALS. – 2020. – P. 48.
19. Tilyavova S. A. MODERN APPROACHES TO THE DIAGNOSTICS AND TREATMENT OF URINATION DISTURBANCES IN PREMENOPAUSAL WOMEN //UZBEK MEDICAL JOURNAL. – 2022. – T. 3. – No. 3.
20. Tilyavova S. et al. Obstetric aspects of urination disorders in women // Journal of problems of biology and medicine. – 2015. – No. 4, 1 (85). – pp. 173-175.

**INNOVATIVE  
ACADEMY**