

Urinary Tract Infections in Pregnant Women

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Annotation: Urinary tract infection (UTI) during pregnancy is an acute nonspecific infectious and inflammatory process characterized by simultaneous or sequential damage to the bladder, ureters, pyelocaliceal system and renal parenchyma (mainly interstitial tissue). Urinary tract infection (UTI) is one of the more common perinatal complications, affecting approximately 8% of pregnancies (1, 2). These infections represent a spectrum, from asymptomatic bacteriuria, to symptomatic acute cystitis, to the most serious, pyelonephritis. The presence of UTIs has been associated with adverse pregnancy outcomes, including increased rates of preterm delivery and low birth weight. Screening for and treating asymptomatic bacteriuria have been shown in multiple studies to reduce the incidence of pyelonephritis in pregnancy (3-5). Given the frequency at which UTIs are encountered in pregnancy, the ability to recognize, diagnose, and treat them is essential for those providing care to pregnant individuals. This Clinical Consensus document was developed using an established protocol in conjunction with the authors listed.

Keywords: *Gestational pyelonephritis. Renal colic; Chronic pyelonephritis; Pyelocalicoectasia; Kidney stenting; Threat of miscarriage.*

INTRODUCTION

Treatment of inflammatory kidney diseases in pregnant women is a difficult problem in urology and obstetrics [1].

Acute pyelonephritis is registered in 2.5-9.5% of pregnant women, occurs against the background of pronounced changes in the upper urinary tract, and is one of the most common extragenital complications of pregnancy [2]. There has been an increase in the frequency of purulent forms of pyelonephritis, which takes on the character of a septic disease, which leads to spontaneous miscarriages, premature placental abruption, and death of the pregnant woman and fetus.

Purpose of the study. To date, there is no consensus among urologists and obstetricians-gynecologists in determining the scope of the study, indications and method of kidney drainage for gestational pyelonephritis at different stages of pregnancy.

This determines the relevance of an in-depth study of the clinic, diagnosis, development of rational methods of kidney drainage, and treatment of purulent forms of pyelonephritis in pregnant women.

METHODS

In the urological clinic for the period from 2023 to 2024, 63 pregnant women with gestational pyelonephritis were observed. Among the patients, young women aged from 18 to 34 years predominated. There were 38 primigravidas and 25 pregnant women again. Three had the first trimester of pregnancy, 26 had the second, and the rest had the third.

Results. The clinical picture of gestational pyelonephritis consisted of general and local symptoms, which were characterized by varying degrees of intoxication, a combination of fever with repeated chills. Painful sensations, up to an attack of renal colic, bothered all patients: in the right lumbar region in 50 patients, in the left - in 13. Dysuria was noted in 54 patients, in the form of frequent painful urination.

Along with general clinical examinations, urine culture was performed with simultaneous determination of the sensitivity of microbial flora to antibiotics, the degree of leukocyturia was identified, and the degree of bacteriuria was quantitatively determined.

During ultrasound examination, all women showed moderate or pronounced dilation of the pyelocaliceal system (PCS), more on the right. The degree of dilation of the cerebral palsy did not depend on the duration of pregnancy. Particular attention was paid to the homogeneity of the structure of the renal parenchyma and its excursion. However, despite the high accuracy of the research method, specialists at our clinic were faced with incompetent interpretation of data on the condition of the upper urinary tract of pregnant women. More often there is a tendency to overdiagnosis with the following conclusions: hydronephrosis, urolithiasis, pyelonephrosis. In our practice, there have been cases of

underdiagnosis, when a functional norm is stated, but there is an anomaly in the development of the kidneys, pyelocalicoectasia, chronic pyelonephritis.

Our research allowed us to reveal that most pregnant women suffer from chronic pyelonephritis, which was found in 49 women. A study of the concentration function of the kidneys using the Zimnitsky method, based on the clearance of endogenous creatinine, showed that the relative density of urine in acute pyelonephritis did not change significantly, whereas in chronic pyelonephritis hyposthenuria was noted.

To select pathogenetic therapy, an antibiogram was determined. Urine culture mainly revealed microbial associations: *Escherichia coli*, *staphylococcus* in 46 examined women; *Proteus*, *Pseudomonas aeruginosa* in 10. In other cases, the urine turned out to be sterile. Before obtaining an antibiogram, therapy was prescribed with semisynthetic penicillins and nitrofurans, to which, according to a number of authors, the microbial flora of urine is most sensitive. Particular attention was paid to normalizing the body's overall reactivity and eliminating symptoms of threatened miscarriage. Detoxification therapy was accompanied by forced diuresis, which ensured not only the removal of toxic substances from the body, but also the release of tubules from desquamated epithelium and leukocytes.

Indications for immediate endourological drainage of the kidneys were:

1. Severe pain syndrome, often taking on the character of renal colic.
2. Febrile temperature with chills, symptoms of septic intoxication of the body.
3. Dilatation of the pyelocaliceal system.

In order to divert urine from the upper urinary tract, renal catheterization was performed for emergency indications in 57 pregnant women and deferred emergency indications in 6 women. Moreover, 50 pregnant women had catheterization of the right kidney, and 13 of the left kidney.

The effect of conservative therapy against the background of restoration of urine passage was observed on days 3-4. Clinically, body temperature normalized, pain in the lumbar regions disappeared or significantly decreased, and dysuria stopped. The dynamics of laboratory parameters have returned to normal by 5-6 days of therapy, in the form

absence of leukocytosis, leukocyturia; ultrasound examination noted a decrease in ectasia of the upper urinary tract. The ureteral catheter was removed on days 6-7 of therapy, the patients became more active and, after repeated positive sonographic dynamics, were discharged for outpatient treatment.

The probability of a repeated attack of pyelonephritis is very high, which requires repeated drainage of the kidneys; in our observations, this happened in 16 pregnant women. For this purpose, stenting of the upper urinary tract was performed for a period of 1 to 3 months.

Conclusion. Analysis of the clinical material from our clinic allows us to draw the following conclusions:

1. Pregnant women, regardless of the stage of pregnancy, with severe pain syndrome,
symptoms of septic intoxication, dilatation of the collecting system should be hospitalized
to the urology department.
2. Timely stenting of the upper urinary tract in cases of persistent disturbance of urinary passage allows
restore urodynamics without resorting to surgery.
3. Pregnant women with a significant urological history should be monitored throughout
pregnancy period at the urologist

REFERENCE

1. *Aliullin RA* Endothelial dysfunction, hemodynamic disorders and their correction with Coraxan in patients with coronary artery disease in combination with COPD in outpatient practice. Modern problems of science and education. 2011. No. 6; [Electronic resource]. Access mode: <http://www.scienceeducation.ru/ru/article/view?id=5223/> (date of access: 06/19/2018).
2. *Karoli NA, Rebrov AP* Chronic obstructive pulmonary disease and cardiovascular pathology // Clinician. 2007. No. 1. P. 13-19.
3. *Buxoro JUD* Arterial gipertenziyadagi mikroelementlar darajasidagi o'zgarishlar //American Journal of Pediatric Medicine and Health Sciences (2993-2149). – 2023. – T. 1. – No. 10. – S. 338-340.
4. *Dzhumaevna Yu.* Cardiovascular risk factors for arterial hypertension in middle-aged patients // American Journal of Biology and Natural Sciences. – 2024. – T. 1. – No. 1. – pp. 1-