

MODERN ASPECTS OF TREATMENT GESTATIONAL PYELONEPHRITIS

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Abstract. Studying the interaction between gestational pyelonephritis and pregnancy is important due to the high percentage of obstetric complications, negative perinatal outcomes and serious diseases in newborns, which emphasize the medical and socioeconomic importance of the problem. In chronic pyelonephritis, pregnancy is complicated by iron deficiency anemia (35-70%), premature termination of pregnancy at various times (15-20%), chronic placental insufficiency (30-35%), preeclampsia (35-70%). 30-40% causes complications such as chronic uterine hypoxia (30-40%), fetal infection (20-30%) and growth retardation (12-15%). In chronic pyelonephritis, the ability of pregnant mothers to adapt to newborns is significantly impaired and the risk of early neonatal death increases.

Keywords: gestational pyelonephritis, treatment, premature birth, nephrostoma.

Relevance. Among pregnant women, chronic pyelonephritis takes the first place among somatic pathologies (48-54%). Pyelonephritis has a negative effect on the course of pregnancy and the condition of the fetus, which is manifested in the risk of miscarriage, premature birth, placental insufficiency, fetal hypoxia, intrauterine infection, preeclampsia and a complicated course of the adaptation period (V.V. Iremashvili, 2007; L. E. Nicolle, 2008; K. Shea et al., 2008; A. J. Schaeffer et al., 2010).

In pyelonephritis, the pathogenic factor that affects the chronic stage of inflammation loses its leading role, the processes affecting the change in the rheological properties of blood and microcirculation play an important role, which leads to the development of a chronic condition. comes - the causes of this disease are a risk factor for the mother and the fetus, leading to perinatal losses.

The study of the interaction between GP and pregnancy is important because of the high percentage of obstetric complications, negative perinatal outcomes and serious diseases in newborns, which emphasize the medical and socio-economic importance of the problem. In chronic pyelonephritis, pregnancy is complicated by iron deficiency anemia (35-70%), premature termination of pregnancy at various times (15-20%), chronic placental insufficiency (30-35%), preeclampsia (35-70%). 30-40% causes complications such as chronic hypoxia of the uterus (30-40%), fetal infection (20-30%) and growth retardation (12-15%). In the background of chronic pyelonephritis, the adaptation ability of newborns is significantly impaired and the risk of early neonatal death increases (L.E. Nicolle, 2008; K. Shea et al., 2008).

Aim of the study. Determine the most promising treatment for gestational pyelonephritis.

Materials and methods. In order to achieve the set goal and fulfill the tasks, the data of 55 pregnant women and their newborns, who applied to the perinatal center of Samarkand city on the basis of the Department of Obstetrics and Gynecology No 1 of SamSMU, were studied during

2020-2022. The women studied during the study were divided into 2 groups: the main group - 35 pregnant women with gestational pyelonephritis (GP) and the control group - 20 conditionally healthy pregnant women.

Examination of pregnant women includes the following: determination of clinical and anamnestic features of the pregnancy process, laboratory diagnosis of inflammatory pathology of the kidneys, examination of the kidneys and small pelvic organs, as well as the state of the fetus and feto-placental system using instrumental methods. Renal function: the amount of urea and creatinine in the blood serum (nitrogen excreting activity of the kidneys), glomerular filtration rate (according to endogenous creatinine clearance), concentrating ability (Zimnitsky test), kidneys and urinary tract (Nechiporenko test), and inflammation in the blood evaluated by the presence of the process.

All patients with OGP treated in our department, as well as patients who were allocated to the control group for statistical analysis, underwent ultrasound research methods to assess the state of the kidneys and upper urinary tract. Researches were carried out on ultrasonic scanners "TOSHIBA SONOLAYER SSA-250A" (Japan), Siemens Sonoline Antares (Germany) and "Aloca - 500" (Japan).

Ultrasound sonography is an effective way to visualize the "stent" when it is necessary to perform stenting of the urinary tract, this method is used both during direct installation and drainage in the ureteral system. can also be used for further monitoring of availability. If there is any doubt about the location of the proximal curl, a minimally invasive X-ray method should be used. When draining the kidney with a "stent" in acute pregnancy pyelonephritis, when the ureteral system and the pelvic cavity are significantly expanded, the mechanism of retaining the proximal curl is not very reliable. The "stent" can migrate into the upper and middle third of the ureter. Ultrasonography is an important tool in dynamic monitoring of stent placement and, consequently, adequate renal drainage.

All women underwent USD and dopplerometry. In this case, the state of the pelvic organs and the fetus, as well as the state of the kidneys, were evaluated. The homogeneity of the renal parenchyma was evaluated during the ultrasound examination of the kidneys, the presence or absence of hyperechoic and hypoechoic structures of the kidneys was measured by the transverse dimension of the pelvis. It is the size of the pelvic cavity that was chosen as an objective criterion for statistical processing, since this parameter reflects the degree of urodynamic disturbance. The largest size was considered.

Table 1

Ultrasound examination information

| Diagnosis | Main group (n=35) | | Control group (n=20) | |
|-----------------------|--------------------------|------|-----------------------------|----|
| | Abs | % | abs | % |
| Pyelonephritis | 35 | 100% | 0 | 0% |

| | | | | |
|--|----|-------|---|-------|
| Chronic salpingo-oophoritis | 8 | 22,9% | 1 | 5,0% |
| Ovarian cyst | 4 | 11,4% | 1 | 5,0% |
| Varicose dilatation of small pelvic veins | 6 | 17,1% | 0 | 0,0% |
| Hydronephrosis | 35 | 100% | 2 | 10,0% |

From subjective symptoms, pain syndrome plays a certain role in diagnosing the severity of the inflammatory process in pregnancy pyelonephritis. Ultrasound is the most convenient and non-invasive method for assessing the condition of the kidneys and fetus, and it is widely used now. Using ultrasound, the state of the kidney parenchyma and the degree of hydronephrosis can be considered as a criterion with a special place in the assessment of the severity of GP.

Results and discussion. According to the clinical manifestations of the disease, all patients received conservative treatment, including infusion and antibacterial agents, depending on the severity of the general condition and local changes in the affected organ.

Conservative treatment included:

- Antibiotic therapy
- "B" group vitamins
- Antispasmodics
- Positional drainage therapy
- Infusion detoxification therapy when clear signs of intoxication are observed in the body
- Symptomatic therapy

In addition to conservative therapy, patients were prescribed drainage of the damaged kidney, taking into account the risk of complications of GP and preterm delivery of pregnancy. Urinary stenting was required in 30 cases and nephrostomy in 5 cases.

The indication for a nephrostoma was the occurrence of hydronephrosis of the 2nd-3rd degree and purulent pyelonephritis.

After stenting and nephrostomy, the general condition of women was observed in dynamics, fever was not noted after 2-3 days. The severity of the symptoms of general intoxication decreased, the intensity of pain in the back and abdomen decreased after 2-3 days, and after the 6th day, this complaint was not recorded in any of the patients of the main group.

Nephrostomas were placed in the second trimester of pregnancy at an average of 27-28 weeks and were removed in the prenatal period.

In 40% of women with preeclampsia, normalization of blood pressure was observed against the background of medical procedures. The average number of days spent in the hospital was 6.4 ± 0.15 days. Follow-up was continued on an outpatient basis.

The laboratory analyzes conducted after the treatment showed positive dynamics, expressed by the redevelopment of inflammatory symptoms (normalization of the total number of leukocytes, normalization of EChT, disappearance of bacteriuria and leukocyturia) in all women of the main group.

In these women, both the complications of pregnancy and the general course improved. It was found that after 1 month of treatment, the general condition of women improved, there were no complaints, only 4 of the 14 women (11.4%) with preeclampsia symptoms remained.

When the results of childbirth were analyzed, premature birth was noted only in 3 cases, and in 33 cases (94.3%) the full-term birth was without complications. In 34.3% of women with signs of fetoplacental insufficiency, these signs were not detected after treatment, but in 25.7% of women, the weight of newborn babies was up to 3000 grams, and the average was 2745.4 ± 120.5 g.

Conclusion. Thus, timely comprehensive diagnosis and treatment procedures help to prevent complications of gestational pyelonephritis, improve the general condition of pregnancy and achieve positive birth outcomes. In II and III degrees of hydronephrosis and purulent changes, the restoration of the permeability of the urinary tract and antibacterial therapy quickly lead to positive dynamics.

Complex therapy of gestational pyelonephritis with the use of a nephrostoma significantly improves blood and urine parameters, reduces complications in the II and III trimesters of pregnancy, and has a positive effect on pregnancy outcomes compared to conventional treatment.

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