To study the clinical and biochemical indices of renal function assessment in chronic pyelonephritis in pregnant women.

In a comparative analysis has been studied renal function in 60 women with chronic pyelonephritis of the pregnant women. With this basic group (n = 30 ) were patients with chronic pyelonephritis without exacerbation, the comparison group (n = 30) - patients with chronic pyelonephritis in the acute stage and a control group (n = 30) - patients with uncomplicated pregnancy. Renal function in patients with chronic pyelonephritis was assessed using the results of clinical blood tests, urine samples Zimnitsky, Nechiporenko, bacteriological urine culture with identification of the species composition of microorganisms and microbial count of the number.

The studies revealed significant pathological changes of renal function in pregnant women surveyed in chronic pyelonephritis, both outside and in the acute stage.

Keywords: chronic pyelonephritis, pregnancy, diagnosis, patients, preeclampsia.

Results of research.

Analysis of clinical blood indices showed that the level of Hb with uncomplicated pregnancy ranged from 107 to 115 g/l of erythrocytes of 3.5 to 3.7 x 10¹² g/l hematocrit - 29.4-31.5 %. Hb without exacerbation rate ranged from 102 to 106 g/l, erythrocyte 3.3-3.4 x 10¹² g/l, Ht - 28-29%. In the acute stage Hb values were an average of 93 - 101 g/l hematocrit (Ht) - 25.9 - 28.2%, the level of red blood cells - 3.1 - 3.3 x 10¹² g/l. In patients with acute exacerbation group of chronic pyelonephritis leukocyte count was elevated in 70% (21 of 30) average 12,3 ± 10³ x 10⁶ g/l, which is 2 times higher than the corresponding figure in the group with uncomplicated pregnancies, the number of band neutrophils was increased 73% (22 of 30) and averaged (7,8 ± 0,5%) and were 2.2-fold higher than those parameters uncomplicated pregnancy. ESR in pregnant women with acute exacerbation of chronic pyelonephritis was on average 45,0 ± 4,3 mm/h, and was elevated in 66.7% (20 of 30).

In uncomplicated pregnancy average leukocyte band neutrophils and ESR meet regulatory performance and only slightly higher than 16,7-20,0 % blocked. In order to study the nature of the microflora of urine was conducted microbiological study in 30 patients with acute exacerbation of chronic pyelonephritis, 30 patients - without exacerbation. Rising urogenital infection plays a significant role in the development of obstetric and perinatal complications in chronic pyelonephritis. In the study of urine in 23.3 % (7 of 30) of women with chronic pyelonephritis without exacerbation revealed asymptomatic bacteriuria, while the urine stool facultative anaerobic microorganisms that are present in low concentrations (<10⁵ CFU/ml). Positive results of bacteriological urine culture in pregnant women with acute exacerbation of chronic pyelonephritis were detected in 86,7 % (26 of 30) of cases.

Microbiological studies revealed that the etiological factors of chronic pyelonephritis most often as the aerobic gram-negative microorganisms: Escherichia coli (33.3%), Proteus vulgarize (10.0%), Klebsiela spp. (5 %) or a group of Gram-positive bacteria Staphylococcus (6,7%), in 11 % of cases world registered association Escherichia coli and Staphylococcus aurous. Our data are consistent with the observations of other researchers showing that Escherichia coli is the dominant pathogen in pyelonephritis pregnant in modern conditions [7, 8, 9].

In studying the results of clinical urine clarified daily diuresis, the reaction, the number of white blood cells, protein, bacteria, in uncomplicated pregnancy with the specific gravity of urine (sample Zimnitsky) studied the concentration of renal function . According to the analysis of urine to Nechiporenko clarified the presence of inflammation . The daily urine of pregnant women with acute exacerbation of chronic pyelonephritis was reduced to $976.4$ ml vs $1112.4$ ml in the comparative group. The ratio of
day to night diuresis during exacerbation of chronic pyelonephritis was 1.24 to 1.52. Nocturia was detected in 4.5 times more frequently in the group with acute exacerbation of chronic pyelonephritis.

In the study of renal concentrating ability in pregnant women with acute exacerbation of chronic pyelonephritis was significantly (p < 0.001) more frequent hyposthenuria, with acute exacerbation of chronic pyelonephritis was significantly (p < 0.001) was more frequently detected leukocyte urea (24 of 30). In the study by the method Nechiporenko all pregnant groups with acute exacerbation of chronic pyelonephritis revealed elevated white blood cell count to 5140.1 ± 135.4% in 1 ml of urine. Proteinuria was diagnosed in (60.0 ± 2.7)% of patients with acute exacerbation group of chronic pyelonephritis, with every second (14 of 30 ) patients, it was moderate and ranged from 0.175 to 0.5 g/l, 30 % of protein in the urine was from 1 to 3 g/l and every second of them was with a preeclampsia.

Conclusions
Thus, the tests revealed significant pathological changes of renal function in pregnant women surveyed in chronic pyelonephritis, both outside and in the acute stage. The most significant changes were found during exacerbation of chronic pyelonephritis and the combination of preeclampsia.

REFERENCES