

## 26. PARTICULARITIES OF ACUTE PYELONEPHRITIS IN PREGNANT WOMEN

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**Introduction.** Pyelonephritis is one of the most frequent diseases between pregnant women (about 20%), with teratogenic effect and unfavorable prognosis in cases with inadequate treatment. The determining factors in Pyelonephritis in pregnancy are morpho-functional changes of the maternal organism, associated with comorbidities (gestational diabetes, gestational hypertension, pre / eclampsia, liver disorders, nephrolithiasis). There are also physiological changes in pregnant women that are favoring the appearance of Pyelonephritis: progressive dilation of the ureters, hypotonia of the excretory system, mechanical compression of the pregnant uterus, pregnancy hydronephrosis, elevated levels of progesterone. This disease has a negative impact on the pregnancy itself, by causing progressive kidney failure, septic forms, Hepatorenal syndrome, and others. Also, Pyelonephritis is an emergency in obstetrics since it can cause preterm delivery, Intrauterine Growth Restriction, chronic fetal hypoxia, development abnormalities or spontaneous abortion.

**Aim of study.** In the study of this pathology in pregnant women, was determined an entire complex of mechanical, hormonal, immune and hydro-electrolytic factors that favor the installation of Acute Pyelonephritis. From the first weeks of pregnancy, 90% of pregnant women experience functional changes in reno-urinary tract that are manifested by a hypotonia and hypokinesia of the ureters. As a result - there is a bladder-ureteral reflux, which elevates the pressure in the calyx, which facilitates the penetration of bacteria and toxins into the kidneys and facilitates the appearance of Acute Pyelonephritis, or exacerbation of the chronic process. Pyelonephritis frequently occurs asymptotically in pregnant women (asymptomatic bacteriuria), but tends to worsen in 48% of cases in the 3rd trimester of pregnancy. There were also cases of primary clinical manifestation of the infection in the puerperal period. The importance of gestational PN study is conditioned by the presence of asymptomatic bacteriuria in pregnant women, as well as the installation of physiological pregnancy hydronephrosis in 90% of cases, starting with weeks 6-10, reaching the maximum level - at 22-24 weeks of pregnancy. Glucosuria and urinary alkalization, which is also associated with urinary stasis in the ureters, exacerbates the risk of developing PN, due to the creation of optimal conditions for the invasion and development of conditionally pathogenic microorganisms.

**Methods and materials.** A retrospective study, that includes data from 45 medical files of pregnant women that were diagnosed with Acute Pyelonephritis : age (V), nr of pregnancy (P), pregnancy trimester (TS), type of lumbar ache (DL), hydronephrosis (H), urinalysis (AGU), results of USG (USG), uroculture (U), complications : imminent abortion (IA), premature birth (NP), retarded fetal development (R.DIU). ). Test  $\chi^2$

**Results.** A : 26,5 years ( $p=0.203$ ) , P : 66,7 % primiparous ( $p=0.278$ ), TS : 57,8 % trim. III ( $p=0.310$ ), LA : 71,1 % ( $p=0.183$ ), H : 53,3% cases ( $p=0.254$ ), UA : leucocytes 100% ( $p<0,001$ ) / RBC – 60,5% ( $p=0.130$ ), bacteria – 57,1 % ( $p=0.197$ ), USG : 62% pyelocaliceal dilation ( $p=0.174$ ), U : 95% E. Coli ( $p<0,001$ ), IA : 40% ( $p=0.165$ ) PB : 15,5% ( $p=0.212$ ) RFD 13,3% ( $p=0.262$ ).  $\chi^2=29,7$

**Conclusion.** Acute Pyelonephritis affects pregnant women, due to many morphological and functional changes that appear during pregnancy, has a bad influence on intrauterine development of child, elevates the risk of pregnancy disruption, premature delivery, IUD retardation, intr-uterin infection development, etc.