

## ON THE QUESTION OF EXPECTANT MANAGEMENT OF LABOR IN FULL-TERM PREGNANCY COMPLICATED BY PREMATURE RELATION OF AMBIENT FLUID

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**RELEVANCE OF THE PROBLEM** Premature is the rupture of amniotic fluid when the membranes rupture before the onset of labor, regardless of the stage of pregnancy. Premature rupture of membranes occurs in 2.7–17% of cases [1]. Antenatal rupture of membranes is a complex obstetric problem associated with a high risk of perinatal and maternal morbidity. As a result of premature rupture of the membranes, small parts of the fetus, especially the umbilical cord, may fall out. Oligohydramnios or anhydria that occurs after premature rupture of the membranes create conditions for threatening unilateral compression of the umbilical cord and placenta by individual parts of the fetus or the entire fetus, which often leads to asphyxia [2]. However, the most common unfavorable prognosis for mother and child is due to the development of septic complications [3]. The frequency of infection after premature rupture of membranes is directly dependent on the duration of the anhydrous period (the time between rupture of membranes and birth of the fetus) [4]. Despite significant advances in obstetric science, the problem of rational management of pregnancy and childbirth complicated by premature rupture of amniotic fluid remains insufficiently resolved. There is no consensus regarding the tactics of managing urgent labor complicated by premature rupture of membranes. Issues related to induction of labor depending on the duration of the anhydrous period and the prevention of infectious complications are controversial. Some authors recommend starting labor induction immediately after a diagnosis of premature rupture of amniotic fluid is made. Others believe that in the absence of symptoms indicating the presence of infection, vaginal delivery is contraindicated and one can wait for the spontaneous onset of labor [1].

**PURPOSE OF THE STUDY** To evaluate the effect of the duration of the anhydrous period on the incidence of septic complications in women and newborns.

**RESEARCH METHODOLOGY** Conducted clinically statistical analysis of 346 urgent deliveries complicated by premature rupture of amniotic fluid. In order to determine the effect of the duration of the anhydrous period on the incidence of septic complications in women and newborns, all patients were divided into two groups. Group 1 (main group) included 54 (15.61%) women whose anhydrous period was more than 12 hours. The second group (control group) included 292 (84.39%) women whose anhydrous period was up to 12 hours. Both groups were formed using the method of

continuous research. All women during hospitalization were under observation in the labor and delivery unit. Every 4 hours, the patient's body temperature, hemodynamic parameters of the woman in labor, the nature of discharge from the genital tract, fetal heart rate, and uterine contractility were monitored. Upon reaching 12 During an hour-long water-free period, antibiotic prophylaxis was administered ( cefotaxime 1 g IM every 6 hours), hematological blood parameters were monitored (complete blood count every 24 hours). The survey protocol recorded the following factors: social demographic, medical, obstetric and gynecological history data , features of the course of this pregnancy, childbirth, the postpartum period, early neonatal period, data from histological examination of the placenta.

**RESEARCH RESULTS** . When analyzing our study, it was revealed that the predominant number of women in both groups were aged from 21 to 30 years, in the control group there were 6 women over 40 years of age. According to the level of available education in both groups, the largest number of patients had secondary general and secondary specialized education: in the main group - 32 (59.25%) women, in the control group - 175 (59.93%) women. The predominant number of patients in the main and control groups belonged to the urban population - 31 (57.41%) and 188 (64.38%), respectively. Most of the women from both groups did not have bad habits, and of the existing bad habits in group 1, 10 (18.52%) and in group 2, 37 (12.67%) patients were smoking. The majority of women in the main and control groups were married - 88.89% and 97.26%, respectively. Of the infectious diseases in the main and control groups, it was noted that more than half of the women in each group had chronic tonsillitis - 33 (61.11%) and 160 (54.79%) people, respectively. Analyzing the existing extragenital diseases, we note that in the main and control groups there were practically healthy women - 30 (55.56%) and 185 (63.36%) people, respectively. Among somatic pathologies in both groups, the largest number of women had chronic pyelonephritis - 15 (27.78%) patients in the main group and 65 (22.26%) in the control group. In both groups, in isolated cases, diseases such as arterial hypertension and varicose veins of the lower extremities were noted. 20.37% of women from the main group and 18.49% from the control group were obese. Based on the results of a study of obstetric data gynecological history, the following results were obtained. The age at which menstruation began , the nature of the menstrual cycle, and the onset of sexual activity did not differ significantly among the women examined. The majority of patients in both groups suffered from inflammatory diseases of the pelvic organs: in the main group - 31 (57.41%) people, in the control group - 146 (50.00%). In both groups, in isolated cases, diseases such as a history of infertility and benign uterine tumors were noted. Analyzing the obstetric history data, the following results were obtained. In the main group there were significantly (  $p < 0.05$ ) more women who had an uncomplicated obstetric history than in the control group - 32 (59.26%) and 127 (43.49%) people,

respectively. As the analysis of previous pregnancies showed, in the group with an anhydrous period of more than 12 hours there were significantly ( $p < 0.05$ ) fewer patients who had a history of induced abortion than in the group with an anhydrous period of up to 12 hours - 16 (29.63%) and 126 (43.15%) people, respectively. In the main and control groups there were patients who had a history of spontaneous miscarriages at various stages of pregnancy - 6 (11.11%) and 39 (13.36%) women, respectively. Assessing the parity of pregnancy, we note that in the main group there were significantly more primigravidas than in the control group - 39 (72.22%) and 160 (54.79%), respectively ( $p < 0.05$ ). Almost all multiparous women in the analyzed groups had previous births at term; in both groups, premature births were observed in isolated cases. Almost all patients were registered at the antenatal clinic. Among the factors influencing the nature of the course of labor, complications and diseases suffered during this pregnancy occupy a significant place. In both groups, the largest number of women suffered genital tract infections during pregnancy - 20 (37.04%) people in the main group, 113 (38.7%) in the control group. The same number of patients in the groups suffered exacerbation of chronic pyelonephritis, 1st degree anemia, and acute respiratory disease during pregnancy. Studying the features of the course of this pregnancy, it is noted that the majority of women in the main and control groups had a pregnancy without complications - 24 (44.44%) and 127 (43.49%) people, respectively. Among the complications of this pregnancy, threatened miscarriage, chronic placental insufficiency, chronic non-progressive fetal distress, and preeclampsia were equally common in both groups. Almost all women had a singleton pregnancy and a cephalic presentation of the fetus. A clinical analysis of the course of labor was carried out and the following results were obtained. Most of the births were vaginal, however, in the main group - 13 (24.07%) and the control group - 46 (15.75%) births ended in cesarean section. In the structure of indications for cesarean section in the main and control groups, weakness of labor that was not amenable to conservative therapy was in first place - 9 (69.23%) and 13 (28.26%) cases, respectively. It is noteworthy that in the main group this indication for cesarean section occurred significantly more often than in the control group ( $p < 0.05$ ). Most women in the groups underwent labor induction, in the main group significantly more often ( $p < 0.05$ ) than in the control group - in 36 (66.67%) and 150 (51.37%) people, respectively. Abnormalities of labor were detected in 38 (70.37%) patients of the main group, which was significantly ( $p < 0.05$ ) more common than in women in the control group - 143 (48.97%). Pregnant women with an anhydrous period of more than 12 hours were significantly more likely ( $p < 0.05$ ) to experience weakness in labor than in patients with an anhydrous period of up to 12 hours - 33 (61.1%) and 106 (36.3%) people, respectively. Also in the groups there were such anomalies of labor as excessively strong labor, discoordination of labor, without significant differences. For the majority



of women in the main and control groups, the afterbirth period proceeded without complications - 52 (96.30%) and 284 (97.26%) people, respectively. In isolated cases of complications of the third stage of labor, dense attachment of the placenta was noted - in the main group - 3.7%, in the control group - 2.4%. Most of the children born to these women had satisfactory Apgar scores. In the main group, 4 (7.4%) children had a score of less than 7 points on the Apgar scale in the first minute, and 8 (2.74%) in the control group; after 5 minutes – 3 (5.55%) and 8 (2.74%) children, respectively. Almost all children born to these women had no pathology of the central nervous system - in the main group there were 46 (85.18%) children, in the control group - 266 (91.09%). At the same time, signs of birth trauma were found in 4 (7.41%) children of the main group and in 13 (4.45%) in the control group. Cerebral ischemia was detected in 2 (3.7%) newborns in the main group and 11 (3.77%) in the control group; vegetative dysfunction – in 1 (1.85%) child in the main group and 1 (0.34%) in the control group. Among others

complications in the main and control groups, intrauterine growth retardation was found in 5 (9.26%) and 32 (10.96%) children, chronic intrauterine fetal hypoxia - 7 (12.96%) and 33 (11.3%), congenital malformations – 4 (7.41%) and 22 (7.53%), neonatal jaundice – 8 (14.81%) and 34 (11.64%), respectively. Based on the comparison of significant differences between groups according to social There are no demographic factors, extragenital pathology, gynecological diseases, or peculiarities of the course of this pregnancy. Thus, we can exclude differences in the incidence of septic complications in women and newborns depending on the presence of differences in the above factors. And at the same time, statistically significant differences between the groups were revealed: in the main group there were significantly more ( $p < 0.05$ ) primiparas, cases of labor induction, labor anomalies (mainly weakness of labor), which naturally leads to an extension of the anhydrous period. In order to determine the effect of the duration of the anhydrous period on the incidence of septic complications in women and newborns, the characteristics of the course of the postpartum period, early neonatal period, and histological examination of the placenta were compared between groups. For the majority of women in the groups, the postpartum period proceeded without complications: in the main group - 41 (75.93%) people, in the control group - 239 (81.85%). In the main and control groups, complications such as uterine subinvolution - 14.81% and 9.93% - occurred with slightly different frequencies; hematometra – 1.85% and 1.71%; lochiometer – 3.7% and 2.74%; endometritis – 3.7% and 2.74%; Only in the group with an anhydrous period of up to 12 hours, 1.03% of women had suture dehiscence in the wound area of the perineum. The health status of newborns was analyzed based on the developmental history of the newborn based on an examination by a pediatrician neonatologist in the maternity hospital. The majority of newborns in the main and control groups had no

signs of intrauterine infection - 49 (90.74%) and 285 (97.6%) children, respectively. Meningitis was diagnosed only in the control group – 1 (0.34%) child. Pneumonia was detected in only 1 (1.85%) newborn in the group of women whose water-free period was more than 12 hours. Purulent conjunctivitis was found in 1 (1.85%) child in the main group and 5 (1.71%) in the control group. Among other diseases, in the main and control groups there were 2 (3.7%) and 1 (0.34%) newborns, respectively, with generalized candidiasis. Inflammatory changes (in the form of necrosis, leukocyte infiltration, villusitis, placentitis, etc.) during histological examination of the placenta were detected significantly more often in the main group ( $p < 0.05$ ) than in the control group - 44.83% and 21.69%, respectively. The differences between the groups in the incidence of septic complications in the mother and newborn are not significant ( $p > 0.05$ ), which indicates that there is no significant effect of the duration of the anhydrous period on the level of purulent septic diseases when taken into account in isolation.

**CONCLUSIONS** Conducted clinically statistical analysis of 346 urgent deliveries complicated by premature rupture of amniotic fluid. Our data indicate that a long anhydrous period (more than 12 hours) against the background of antibiotic prophylaxis does not lead to an increase in the incidence of purulent septic complications in mother and child. Thus, the use of expectant management in full-term pregnancy complicated by prenatal rupture of amniotic fluid, provided there are no symptoms indicating the presence of infection, contraindications for vaginal delivery, against the background of antibiotic prophylaxis, careful monitoring of the patient's body temperature, hemodynamic parameters of the woman in labor, the nature of discharge from genital tract, fetal heart rate, contractile activity of the uterus does not have a negative effect on the health of the mother and child, allows the obstetrician a gynecologist to carry out a more "gentle" delivery and reduce the frequency of surgical delivery.

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