

The Effectiveness of Expectant Management of Labor in Case of Untimely Rupture of Amniotic Fluid in Women from the Group of Low Obstetric Risk

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Abstract

Purpose: To confirm the feasibility of expectant tactics in case of untimely outpouring of amniotic fluid (NIOV). Investigated 232 cases with NIV in the main group and 100 people in the control group with active management (labor induction after a 12 hour anhydrous period. The gestation period in all cases is from 37 to 40 weeks.

Results: In the main group, there was a sharp decrease in operative activity, hypoxia in newborns, infectious complications and ineffective labor inductions.

Keywords: Labor Inductions; Amniotic Fluid; Women; Low Obstetric Risk

Introduction

One of the most significant problems of modern obstetrics is the search for optimal technologies that provide the greatest efficiency of the obstetric service with the absence of invasive technologies and the minimum cost. These are internationally recognized criteria for the effectiveness of medicine.

At the same time, the effectiveness is determined by the frequency and nature of complications in women in labor and parturient women, as well as the condition of fetuses and newborns.

At present, the most promising direction of obstetric tactics in Europe is the expectant management of labor in women with untimely rupture of amniotic fluid (NIV) and low obstetric and perinatal risk.

This tactic is based on the natural formation of the generic dominant with un-timely discharge of amniotic fluid in conditions of physical and psychological comfort. At the same time, the use of antibiotics is limited only to cases of exceeding the anhydrous period of 18 hours, when all natural biological barriers to infection or clinical manifestations of chorioamnionitis disappear.

We have set the goal of confirming the feasibility of expectant management of labor in case of premature rupture of amniotic fluid.

Materials and Methods of Research

Complications of the course of labor and the condition of newborns were analyzed in 232 women of the main group in whom expectant tactics were used and in 100 women of the control group the anhydrous period did not exceed 13 hours and who underwent labor arousal due to the increase in the waterless period and the absence of labor. In all cases, the gestational age ranged from 37 to 40 weeks. The average age and parity of childbirth in the main and control groups did not practically differ. Women with signs of acute and chronic infection (pyelonephritis, vaginitis, tracheobronchitis, tonsillitis) were excluded from the study.

Results and Discussion

The anhydrous period in the main group of women ranged from 3 to 57 hours, averaging 21 hours 34 minutes \pm 38 minutes and in the control group 7 hours 10 minutes \pm 46 minutes. with a fluctuation from 6 to 12 hours 10 minutes.

At the same time, the duration of the anhydrous period up to 18 hours was noted by us in 143 puerperas, which amounted to 61.6% of all women in the main group, in 198 (85.3%) women the anhydrous period did not exceed 24 hours, and in 216 (93.1%) person 36 hours. Antibiotic therapy in this group of women was carried out in 89 (38.4%) people.

With expectant tactics in women with premature rupture of amniotic fluid, in 216 (93.1%) labor was completed within one and a half days of anhydrous period.

In the control group, the duration of the anhydrous period up to 6 hours occurred only in 5 (5%) observations, up to 10 hours in 42 cases (42%) and in 52 to 12 hours. In one observation, the duration of the anhydrous period was 12 hours 10 minutes. Prophylactic antibiotics were used in 35 (35%) cases.

Thus, the duration of the anhydrous period indicated a higher likelihood of infectious complications in the main group of women. At the same time, the frequency of prophylactic use of antibiotics was approximately the same in the control and main groups, which is associated with the peculiarity of the technology used (antibiotic therapy only after 18 hours of anhydrous period or clinical manifestations of chorioamnionitis).

From the characteristics of the course of labor in the main and control groups, it was noted that the percentage of caesarean sections in the main group of women was more than 4 times less than in the control group. At the same time, without effective labor enhancement in the control group of pregnant women was an order of magnitude higher than in the main group. And effective treatment of violations of uterine contractile activity was noted 2 times more in the main group of women in labor.

When evaluating complications of the labor process, approximately the same frequency of weakness of labor forces in the main and control groups was revealed, an almost twofold excess of the frequency of discoordination of labor forces in the control group and the presence of chorioamnionitis only in the main group.

Analysis of the course of labor and methods of delivery among women of the main group, whose labor was complicated by chorioamnionitis, showed that a complicated course of labor took place in 5 (2.16%) women in labor, in 4 (1.72%) of whom labor was completed by caesarean section. At the same time, the weakness of the labor forces occurred in 1 (0.43%) women in labor and the discoordination of the labor forces and progressive fetal hypoxia ended in cesarean section in 2 (0.86%).

Assessment of the condition of newborns showed a tenfold increase in the number of children with hypoxia at birth in the control group. In the main group, neonatal hypoxia with an Apgar score of 4 to 7 was observed in 4 (1.72%) children, in the control group in 23 (9.9%). In all cases of neonatal hypoxia, the anhydrous period exceeded 30 hours.

It is interesting to note that the frequency of infectious complications in the control group of puerperas was more than 3 times higher than that of the main group of women and was, respectively, 10 (10%) and 7 (3.01%). At the same time, postpartum endometritis, 4 (4%) cases with clinical manifestations were noted only in the control group. And with infectious complications in the main group of women, the average waterless period was 32.1 ± 2.6 hours.

The analysis of indicator indicators of the city Perinatal Center in the context of the application of such a tactical approach to the management of labor with NIV showed their correlation dependence.

A sharp dynamic decrease in the frequency of ineffective labor enhancements, neonatal hypoxia and the number of postpartum endometritis was noted in the group of women in whom expectant tactics were used with NIV.

According to our data, with expectant tactics in NIV conditions, there is a decrease in the percentage of complications in childbirth by 1.7 times, a decrease in operative activity by 7.6 times, an increase in the efficiency of labor arousal by 12.3 times and a decrease in the frequency of neonatal hypoxia by 10.7 times.

At the same time, the study showed the inexpediency of expectant tactics when the duration of the anhydrous period is more than 30 hours, since the percentage of complications of the birth process and the postpartum period reaches 100%, and hypoxia in newborns is within 80% [1-5].

Findings:

1. Expectant tactics in NIV among women with the absence of acute and chronic infectious processes are most advisable.
2. Expectant tactics in NIVI can significantly reduce the percentage of ineffective labor inductions, surgical activity, neonatal hypoxia and infectious complications.

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