

ANTENATAL ANAMNESIS OF CHILDREN WITH LOW BIRTH WEIGHT

Shumna Tamila

Doctor of Medical Sciences, Professor
Zaporizhia State Medical University

Mavropulo Tetyana

Doctor of Medical Sciences, Professor,
Head of the Department of Pediatrics 3 and neonatology
DniproState Medical University

Levchuk-Vorontsova Tetyana

candidate of medical sciences, assistant
Zaporizhia State Medical University

Titov Herman

Doctor of Medical Sciences, First Vice-Rector
Dnipro Medical Institute of Traditional and Non-Traditional Medicine

Today all over the world the important problem in medicine is low birth weight in children. The consequences of this condition correlate with the survival rate of newborn after birth and the formation of various diseases throughout life [1]. The incidence of children with low birth weight is 14.6% [2]. Recently, the attention of obstetricians and pediatricians is aimed at ensuring intensive nursing, care, monitoring of the health status and quality of life of premature born children with very low and extreme low body weight. Most often, in children with low birth weight, diseases of the nervous system are recorded due to intracranial birth trauma with the development of cerebral palsy in 8.1% of children, epilepsy - in 1.7%; psychomotor delay – 13.2% and intellectual disability [3, 4]. The frequency of manifestations of transient neurological changes in the first months of life even in full-term newborns depends on their gestational age at birth at the same time [5]. But the study of the state of the nervous system in children with low birth weight and the role of genetic factors in the formation of impaired psychomotor development showed that the dominant allele C of the FADS2 gene (rs174583) can perform a protective function to protect the nervous system from the negative effects associated with premature birth [6]. Today, it is required to introduce effective measures aimed at creating conditions for a full life and development of a child from birth to adulthood [7]. Therefore, the study of anamnestic data and the health status of children born with low birth weight is a very important issue.

Purpose. The study of the antenatal history of children born with low birth weight.

Materials and Methods. The studied of antenatal history in 137 children born with a low body weight of 1500-2499 g (observation I group - 50 prematurely born children with a body weight of 1500-1999 g (1776.26 ± 20.06 g) and a gestation term of $33.0 \pm$

0.3 weeks; II group - 64 premature babies weighing 2000-2499 g (2225.31 ± 19.46 g), gestation term 34.3 ± 0.1 weeks; III group - 23 children with birth weight (1500-2499 g (2105.00 ± 56.41 g), low to the gestational age of 37.5 ± 0.2 weeks. Control IV group - 31 children with birth weight ≥ 2500 g (3009.03 ± 73.04 g) and gestational age ≥ 37 weeks (38.0 ± 0.3 weeks). Statistical data processing was performed using the Statistica for Windows 6.1.RU licensed software package, serial number AXXR712D833214SAN5. To determine the risk factors for the birth of children with low body weight, the method of factor analysis was used and the odds ratio (OR) was calculated using a four-field table with the determination of the confidence interval (CI) by the Woolf method.

Results. This study showed that all mothers of children of I, II, III groups had a complicated course of pregnancy (100%). The incidence of complicated labor in I group - 76.0%; in II group - 65.6%; in the third group - 65.2% of cases. The frequency of complicated pregnancy in IV group recorded in 16.1%, complications in childbirth - 16.1% ($p < 0.05$ when compared with groups I, II and III).

In the 1st observation group, significantly more often ($p < 0.05$), when compared with children of the 3rd and 4th groups, were recorded: the threat of termination of pregnancy in the first trimester (74.0%; 47.8%; 16.1%); threat of termination of pregnancy in the second trimester (70.0%; 43.5%; 22.6%). Also in the 1st observation group, when compared with children from the 3rd group, prenatal discharge of amniotic fluid was more often recorded (46.0% and 13.0%); premature placental abruption (12.0% and 0%). The acute respiratory diseases of the upper respiratory tract during pregnancy and chronic inflammatory gynecological diseases in the 1st observation group recorded with a frequency of 44.0% and 60.0% versus 3.2% and 3.2% in the control group ($p < 0.05$). Pregnancy pyelonephritis diagnosed in 14.0% of cases.

In the second group of observation, when compared with the third and fourth groups, the threat of termination of pregnancy in the second trimester was significantly more often ($p < 0.05$) (71.9%; 43.5%; 21.7%) and premature discharge of amniotic fluid - 43.8%; 13.0%; 9.7%, respectively. The threat of termination of pregnancy in the first trimester (70.4% and 16.1%) and acute respiratory diseases of the upper respiratory tract during pregnancy (42.2% and 3.2%) recorded significantly more often ($p < 0.05$) in II group, when compared with IV group. The pyelonephritis of pregnant women registered in 12.5% of mothers who gave birth to children with low body weight 2000-2499 g (II group).

The chronic inflammatory gynecological diseases in III group recorded in 52.2% of cases versus 3.23% in the control group ($p < 0.05$), and pyelonephritis of pregnant women recorded in 13.0%. Smoking during pregnancy was significantly more often registered in mothers of children in group III when compared with IV group (26.0% and 3.23%).

But the statistical factor analysis showed that the data on the threat of termination of pregnancy in the first trimester was a reliably significant first factor (OR=4.12; 95% CI [2.06-8.24]; $\chi^2 = 3.84$, $p = 0.0001$) and the threat of termination of pregnancy in the second trimester (OR=4.35; 95% CI [2.03-9.0]; $\chi^2 = 3.84$, $p = 0.00$). The second factor

was acute respiratory diseases of the upper respiratory tract transferred during pregnancy (OR=3.10; 95% CI [1.2-7.66]; $\chi^2 = 3.84$, $p = 0.02$).

The main unfavorable antenatal risk factors associated with the birth of children with low birth weight are the threat of termination of pregnancy and acute respiratory diseases suffered during pregnancy.

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