

Are there any risk factors for foetal hypoxia in term PROM?

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Objective. To evaluate potential factors influencing foetal hypoxia in pregnancies with premature rupture of membranes (PROM) at term.

Materials and Methods. This retrospective observational study included singleton pregnancies with term PROM (≥ 37 weeks) admitted to our hospital between January 2022 and December 2023.

Two groups were compared: Group 1 ($n = 533$) with neonates without hypoxia and Group 2 ($n = 82$) with neonates with hypoxia. Hypoxia was defined as at least one of the following: APGAR score < 5 at 10 minutes, and/or neonatal resuscitation > 10 minutes, and/or neonatal acidosis ($\text{pH} \leq 7$ and/or $\text{BE} \leq -12$ mmol/L).

Results. The two groups were similar in maternal age, BMI, parity, and nationality, as well as the incidence of pre-gestational and gestational diseases.

The rectovaginal group B Streptococcus (GBS) colonisation was 19 vs 22% in the group 1 and 2 respectively ($p = 0.4$).

The incidence of SGA (neonatal weight $< 2,500$ g) was similar between the study groups (2.3 vs 3.7%, $p = 0.3$).

Labour induction rates were comparable (33.6% vs 30.5%, $p = 0.86$), as was the use of oral PGE1, vaginal PGE2, and oxytocin (alone or combined).

Delivery modes were also similar (vaginal delivery: 84.8% vs 74.4%; vacuum: 5.8% vs 10.9%; caesarean section: 9.2% vs 14.6%, $p = 0.10$).

Conclusions. None of the evaluated factors (maternal characteristics and diseases, incidence of GBS positivity, incidence of SGA, induction, induction method, and delivery mode) were associated with neonatal hypoxia in pregnancies with term PROM.