Perinatal risk factors for neonatal hyperbilirubinemia in healthy term neonates: a retrospective case-control study

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Objective. The aim of the study was to evaluate underlying causes and to define perinatal risk factors of neonatal jaundice in healthy term neonates, improving knowledge which would be valuable to help identify strategies for risk reduction.
Materials and Methods. The study was a retrospective, observational analysis conducted from January 1, 2022, to August 15, 2022. Data from infants with a gestational age ≥ 35 weeks and birth weight ≥ 2500 grams were prospectively collected. Two groups were identified: the first with infants' total serum bilirubin (TSB) level ≥ 12 mg/dL (205 μmol/L) and the second group with TBS levels in the normal range. Infants' data were cross-referenced with maternal information such as maternal disorders, delivery induction strategy and type of delivery.
Results. A total of 200 mother-infant pairs were included in the study. Normal vaginal delivery (46.4% *vs* 32.1%, p = 0.02) and Oxytocin induction (36.2% *vs* 28.1%, p = 0.03) were a risk factor for neonatal jaundice. Epidural analgesia was not statistically significant as a risk factor for neonatal jaundice (27.3% *vs* 29.1%, p = 0.32).
Conclusions. The delivery type affects neonatal jaundice development. Vaginal delivery and Oxytocin induction were the only perinatal risk factors for neonatal jaundice.