Neonatal outcomes of maternal Immune Thrombocytopenic Purpura (ITP)

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Objective
Idiopathic thrombocytopenic purpura (ITP) is an autoimmune disorder characterized by low platelet counts and the involvement of platelet autoantibodies. Overall, about 3-4% of thrombocytopenia of pregnancies is due to an immune process. Neonates born to mothers with idiopathic thrombocytopenic purpura (ITP) have an increased risk for neonatal thrombocytopenia and hemorrhagic complications. The aim of this study was to determine the maternal and neonatal outcomes of pregnancies with ITP and also to identify risk factors that predicts neonatal thrombocytopenia.

Methods
We performed a retrospective analysis of 40 pregnancies with ITP and their 40 neonates. The following information was extracted from the medical charts for each patient: age, parity, time of diagnosis, treatment for ITP, platelet count in early pregnancy and at delivery, history of prior splenectomy, bleeding tendency during pregnancy, mode of delivery, gestational age at delivery, neonatal birth weight, APGAR scores, cord artery pH, neonatal platelet count at birth and at nadir, need and nature of postnatal treatment, duration of neonatal thrombocytopenia and occurrence of intracranial or gastrointestinal hemorrhage.

Results
The mean maternal platelet counts were 94, 5 ± 66, 5 (9-238×10⁹/L) in early pregnancy and 81, 8± 51, 7 (28-222×10⁹/L) at delivery. Among the 40 neonates, thrombocytopenia (platelet count of less than 150×10⁹/L) was detected in 15 neonates (37, 5%) whom 8 of them had severe thrombocytopenia (platelet count of less than 50×10⁹/L). Ten of the 15 neonates with thrombocytopenia required treatment to increase the platelet counts. There was statistically significant association between neonatal thrombocytopenia and maternal splenectomy history and maternal duration of thrombocytopenia. There was no statistically significant correlation between maternal platelet count and neonatal platelet count.

Conclusion
Management of ITP in pregnancy requires close collaboration between obstetrician, hematologist, anesthetist and neonatologist. Clinicians should pay special attention in these neonates because of risk for development of neonatal thrombocytopenia. Maternal and neonatal outcomes in patients with idiopathic thrombocytopenic purpura is generally good.