ABO incompatibility: which one matters?

To the Editor,

I have read with great interest the article by Akgül et al. about ABO incompatibility and jaundice in the newborn, which appeared in the Journal [2013; 55: 506-509]. The authors emphasized the importance of maternofetal ABO incompatibility in causing severe neonatal jaundice and even kernicterus, and retrospectively compared 122 and 44 newborns with O-A and O-B blood group incompatibility, respectively. They concluded that blood type has no effect on the parameters that may influence the outcome of ABO incompatibility in Turkish newborns. However, I have some criticisms regarding the design, methodology, and conclusions of the study, as follow hereunder.

The authors declared that they aimed to evaluate the effect of the type of blood group incompatibility on the severity of hemolysis, as seen in the *Introduction* and *Discussion*; however, the *Material and Methods* section included only a comparison of some demographic characteristics and laboratory parameters (only some of which are related with hemolysis) in newborns with either O-A or O-B blood group incompatibility. On the basis of the present methodology, the aim (and the title) of the study would more appropriately have been "Comparison of the demographic and laboratory characteristics and incidence of significant hyperbilirubinemia in O-A and O-B blood group incompatibility" instead of aiming to determine the effect of blood group on hemolysis. The aim of the authors would have been possible only if they had compared O-A and O-B newborns regarding only the obvious (and accepted) findings of hemolysis (mild-to-moderate anemia, reticulocytosis, spherocytosis, and a positive direct antiglobulin test)[1-3], since isoimmunization is unlikely to be the cause of hemolysis in ABO-incompatible newborns without any laboratory evidence of hemolysis. The single conclusion that might have been drawn from the findings of the present study would be "Blood type has no relationship with (but not influence on) the outcome of ABO incompatibility".

Furthermore, regarding the data about the Turkish population, one should also consider that the reticulocyte count, a positive direct antiglobulin test, and the presence of a sibling with neonatal jaundice are good predictors for the development of significant hyperbilirubinemia and severe hemolytic disease in newborns with any type of ABO incompatibility, as reported in a previous study performed in the Turkish population[4].

On the other hand, considering the incidence and severity of significant hyperbilirubinemia in either O-A or O-B blood group incompatibility, I should mention again that no differences were observed between O-A and O-B mother-infant pairs in that Turkish study[4].

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