Perinatal outcome and procedure related complications after intrauterine transfusion in red cell alloimmunization

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Context: Intrauterine transfusion of packed red cells is a very effective treatment of anemia in fetuses affected by Rh-alloimmunization. We wanted to compare our results with published results from other centres to identify areas that can be improved. Objectives: Study perinatal outcome and procedure related complications after intrauterine transfusions in red cell alloimmunization. Methods : prospective data of women with Rh-alloimmunized pregnancy undergoing intrauterine transfusion from Jan 2011 to October 2014 Patients : 102 women with Rh isoimmunized pregnancy with fetal anemia Intervention : intrauterine intravascular transfusion of packed red blood cells Main outcome measures: perinatal outcome and procedure related (PR) complications Results : A total of 303 intrauterine transfusions were performed in 102 women. Of 102 fetuses, 22 were hydropic at first transfusion. The mean period of gestation and hematocrit at first transfusion was 26.9 weeks and 17% respectively. Average number of transfusions were 2.97 (1-7). Overall survival was 93% and mean period of gestation at delivery was 34.5 weeks. Mean hematocrit at delivery was 36.9%. Fetal death occurred in 4 cases (3PR), neonatal death occurred in 3 cases (2PR). Emergency cesarean delivery after transfusion was performed in 4 pregnancies. The total PR complication rate was 2.97%, resulting in overall PR loss in 1.65% per procedure. Conclusion : our results compare favourably with other studies published in literature. Intravascular transfusions is a safe procedure improving perinatal survival in fetuses with anemia due to Rh-alloimmunization