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ANTI - U IDENTIFIED IN ERITREA

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Background: Eritrea is a country located in North East Africa. It is bordered on the North by the Red Sea, on the South by Ethiopia, on the West by Sudan and on the East by Djibouti. There are approximately 3.5 million people living in Eritrea.

Introduction: Anti - U is associated with mild cases of Hemo- lytic Disease of the Newborn and Exchange Transfusion is usually not indicated.

Aims: While working in Asmara, Eritrea at the National Reference Laboratory and using reagents and test cells stored under less than optimal temperature conditions, I received blood samples from a mother and a 4 day old full term infant. The infant's Total Bilirubin was 40.8mg% and the Direct Bilirubin was 2.3mg%. At birth the total and the direct bilirubins were 19mg% and 0.9mg% respectively. There was no patient medical history. The Neonatologists wanted blood for Exchange Transfusion immediately.

Methods and Results: In our laboratory both mother and baby typed B positive. The baby's Direct Coombs Test was 3+. Both the mother's serum and an eluate prepared from the baby's cells reacted positive with all but one cell on the antibody identifica- tion panel. The cell that gave no reaction was U negative. Two (2) U negative cells from separate expired and stored panels were nonreactive with the baby's eluate and the mother's serum. The reaction pattern of the mother's and the baby's specimens were very suggestive of an antibody to a high frequency antigen, possibly anti - U. The probability was very remote of finding a U negative donor. Screening donor units at the local blood bank could not be done. There was no anti - U typing sera and a limited amount of mother's serum to test ABO compatible donors. The mother's one sibling living in the country side was ABO compatible but in- compatible with his sister's antibody.

Summary/Conclusion: I looked to the mother as the source of blood and suggested to the Neonatologists that the mother should donate blood and her cells be used for transfusion. The mother's cells were compatible with the baby's serum and cell eluate. The mother donated red cells two times, for an Ex- change Transfusion and 30ml on day 9 for anemia. After each donation the plasma was returned to the mother. This was the first time for this type of transfusion in Eritrea. The baby was discharged from the hospital on day 15. He was nursing, and was given a two week follow-up clinic appointment. A sample of the mother's blood was sent to the Reference Labo- ratory of Immucor Inc in Norcross, GA USA. The laboratory con- firmed our findings of anti - U in Eritrea.