

Chapter 6

Conclusion and Recommendation

Partial exchange transfusion by using normal saline was proven to be as efficacious as plasma in decreasing hematocrit down below 65% in polycythemic infants that had the range of hematocrit between 70-78%. Although normal saline was slightly inferior to plasma in terms of magnitude of decreasing hematocrit down, no one in the treatment group needed re-exchange transfusion. In practice, time loss to blood banking process for typing and cross matching for plasma takes at least 3 times than that of normal saline and the infants have to be exposed to polycythemia longer. If plasma AB is not available, the recommendation is to start partial exchange transfusion by using normal saline. But if plasma AB is available the time loss of three hours will prompt us to still recommend using normal saline. If hematocrit is greater than 78% the kind of fluid to be used needed to be judge between the two by taking into account the magnitude of decreasing of hematocrit down for which plasma is superior to normal saline.

The events of short term side effect were not different among the normal saline and fresh frozen plasma and the biochemical changes were within the physiologic range. Therefore, normal saline could be used safely, at 1149.07 Baht cheaper and more convenient to plasma for partial exchange transfusion in polycythemic neonates.