



Intravenous literature: Dannaway, D.C. and Noori, S. (2013) A randomized trial of platelet transfusions over 30 vs 120 minutes: is there an effect on post-transfusion platelet counts? Journal of Perinatology. 33, p.703-706.

Abstract:

Objective: To determine whether platelet infusion time affects platelet counts in thrombocytopenic newborns.

Study Design: This was a prospective randomized control study of 43 platelet transfusions given to newborns. Transfusions were randomized to run over either 30 min or 2 h. Platelet counts taken 30 min and 6 h after transfusion were compared using parametric, nonparametric, Pearson's correlation and logistic regression.

Result: Changes in platelet counts 30 min and 6 h after transfusion were not different between the groups. Weak but significant negative correlations existed between postmenstrual age and change in platelet count at 30 min ( $r=-0.33$ ,  $P=0.04$ ) and 6 h ( $r=-0.37$ ,  $P=0.018$ ) after transfusion. There were no differences between the mean blood pressures before and after transfusion in either group.

Conclusion: Transfusion duration does not affect post-transfusion platelet counts in newborns. Babies of lower postmenstrual age (PMA) may have better responses to platelet transfusions. Finally, platelet transfusions over both durations are well tolerated in neonates.

