



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.



Does administration time have an effect on post-transfusion platelet counts? | 2

