



“To determine the efficacy of heparinized saline administered as intermittent flush on functional duration of the peripheral intravenous catheter (PIVC) in neonates” Upadhyay et al (2014).

Reference:

Upadhyay, A., Verma, K.K., Lal, P., Chawla, D. and Sreenivas, V. (2014) Heparin for prolonging peripheral intravenous catheter use in neonates: a randomized controlled trial. Journal of perinatology. December 4th. .

Peripheral intravenous catheter flush solution in neonates [@ivteam](http://ctt.ec/cgMev+) #ivteam

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Abstract:

Objective: To determine the efficacy of heparinized saline administered as intermittent flush on functional duration of the peripheral intravenous catheter (PIVC) in neonates.

Study Design: Randomized, double-blind and placebo-controlled trial.

Setting: Neonatal intensive care unit of a teaching hospital. Participants: Term and preterm neonates born at >32 weeks of gestation who required PIVC only for intermittent

administration of antibiotics.

Intervention: Eligible neonates were randomized to receive 1 ml of either heparinized saline (10 U ml⁻¹) (n=60) or normal saline (n=60) every 12 h before and after intravenous antibiotics.

Main outcome measure: Functional duration of first peripheral intravenous catheter.

Result: A total of 120 neonates were randomized to two groups of 60 neonates each. The mean (s.d.) of age of babies in case and control group was 5.7 (2.5) days and 4.6 (3.1) days, respectively. The average weight of babies in both the groups was 2.1 kg. Mean functional duration of first catheter was more in heparinized saline group, mean (s.d.) of 71.68 h (27.3) as compared with 57.7 h (23.6) in normal saline group (P<0.005). The mean (95% confidence interval) difference in functional duration in the two groups was 13.9 h (4.7-23.15). Mean duration of patency for any catheter was also significantly more in heparinized saline group than control group.

Conclusion: Heparinized saline flush increases the functional duration of peripheral intravenous catheter.

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