

## **To compare the patency duration of a peripheral intravenous cannula (PIVC) using either continuous infusion with 5% dextrose or intermittent flushing with 0.9% saline” Stok and Wieringa (2016).**

### Abstract:

Objective: To compare the patency duration of a peripheral intravenous cannula (PIVC) using either continuous infusion with 5% dextrose or intermittent flushing with 0.9% saline.

Study design: Prospective comparative cohort study, including full-term newborn infants in whom PIVC were placed for the administration of antibiotics. In cohort 1 (n=48), 5% dextrose was infused at 3 ml h<sup>-1</sup>; in cohort 2 (n=50), the cannula was flushed six times daily with 2 ml 0.9% saline. Primary outcome was the duration of PIVC patency. Secondary outcomes included the occurrence of complications, time required by the nursing staff and the cost of materials.

ReTweet if useful... Maintaining peripheral intravenous access in newborn infants  
[@ivteam #ivteam](http://ctt.ec/Fd27H+)

Click To Tweet

Result: Duration of PIVC patency was similar. However, significantly, more complications occurred in cohort 1 (P=0.02), and both cost and time were significantly lower in cohort 2 (P=0.001).

Conclusion: Intermittent flushing and continuous infusion provide a similar duration of PIVC patency; however, intermittent flushing is associated with fewer complications, lower cost and reduced time.

### Reference:

Stok, D. and Wieringa, J.W. (2016) Continuous infusion versus intermittent flushing: maintaining peripheral intravenous access in newborn infants. *Journal of Perinatology*. 36(10), p.870-873.

doi:10.1038/jp.2016.94.



**Thank you to our partners for supporting IVTEAM**