

Since heparin has negative side effects, the aim of this study was to examine whether or not there is any scientific support for intermittent flush with heparin being more efficient in extending the time in situ as compared to intermittent flush with sodium chloride” Gunes and Bramhagen et al (2018).

Abstract:

Problem: Children’s wellbeing should always be considered but during hospital stay, many children experience pain due to medical procedures such as inserting a peripheral venous catheter. In order to prolong the time in situ and to avoid the necessity to change the catheter frequently, it can be flushed with either heparin or sodium chloride. Since heparin has negative side effects, the aim of this study was to examine whether or not there is any scientific support for intermittent flush with heparin being more efficient in extending the time in situ as compared to intermittent flush with sodium chloride.

Eligibility Criteria: A systematic review structured according to PICO was performed. The databases used were PubMed, CINAHL and Cochrane Library, and eligible study designs were systematic reviews and randomized controlled double-blinded trials. The studies were critically appraised and synthesized, after which an evidence grading was performed.

Sample: Two systematic reviews and four randomized controlled double-blinded trials were included.

Results: The systematic reviews were assessed as high quality and the randomized controlled double-blinded trials assessed as moderate quality. The results showed both significant differences, and no significant differences between heparin groups and sodium chloride groups regarding time in situ.

Conclusions: Our conclusion is that heparin might not be necessary but no guidelines are possible to develop.

Implications: Since heparin has negative side effects among children and no significant result in favor of heparin was found, more studies are needed in order to provide evidence-based

care.

Full Text

Reference:

Gunes, A. and Bramhagen, A-C. (2018) Heparin or Sodium Chloride for Prolonging Peripheral Intravenous Catheter Use in Children – A Systematic Review. *Journal of Pediatric Nursing*. August 8th. .

DOI: <https://doi.org/10.1016/j.pedn.2018.08.001>