



#IVTEAM #Intravenous literature: Chirinian, N. and Shah, V. (2013) Does decreasing the frequency of changing intravenous administration sets (>24 h) increase the incidence of sepsis in neonates receiving total parenteral nutrition? *Paediatrics and Child Health*. 17(9), p.501-504.

Abstract:

BACKGROUND: The optimal timing for changing intravenous (IV) administration sets that contain total parenteral nutrition (TPN), with and without lipids, in neonates remains unknown.

OBJECTIVE:

To determine whether decreasing the frequency of changing IV administration sets (>24 h versus every 24 h) in neonates increases the incidence of sepsis within seven days of discontinuation of TPN and microbial contamination of the infusate.

METHODS: The databases searched to identify studies that evaluated the frequency of IV administration sets on sepsis and microbial contamination of the infusate included MEDLINE, EMBASE, CINAHL, Cochrane Library, Scopus and Web of Science. The Evidence Evaluation Worksheet adapted from the American Heart Association's International Liaison Committee on Resuscitation was used to evaluate eligible studies for quality, level of evidence and direction of support.

RESULTS: Two studies were reviewed; however, neither of the studies reported on the



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outcome of sepsis. One study reported that changing IV administration sets every 48 h did not increase the rate of infusate (amino acid or lipid) contamination compared with change every 24 h, while the other study reported an increase in the lipid infusate contamination rate when IV administration sets were changed every 72 h.

CONCLUSIONS: There is insufficient evidence to support or refute routinely changing IV administration sets every 48 h or that decreasing the frequency of set changes increases the incidence of sepsis.



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