

Comparison of Heparin Solution and 0.9% Normal Saline Solution Flushing to Secure the Patency of Central Venous Catheters in Pediatrics patient

Jung Hee Pare

Asan Medical Center, South Korea



Abstract

Purpose: The purpose of this study is to associate the efficiency of heparin and 0.9% normal saline solution flushing for preserving patency of central venous catheters in pediatrics patients.

Methods: A randomized controlled clinical trial was performed. Sixty-two (62) patients were prospectively enrolled and completed the study. The heparin group consisted of 31 patients given 10u/ml (below 10kg) or 100u/ml diluted heparin flushing and the normal saline group consisted of 31 patients with 0.9% sodium chloride flushing.

Results: There was no significant difference in occlusion between the heparin group and the normal saline group in central venous catheters' occlusion. Also there was no difference between these two groups in catheter-related infections.

Conclusion: Flushing with 0.9% normal saline is as effective as flushing with heparin solution in maintaining the patency of central venous catheters. In this study, however, the duration of central line use was different and the infection occurrence was little. Further studies are warranted with a larger sample size at multiple centers.

Key words: Central venous catheters, Heparin, Sodium chloride, Catheter, obstruction, Infection

Jung Hee Pare has graduated from Yonsei University College of Nursing in 2006 with a Master's Degree in Clinical Nursing and attending a PhD. candidate. She is the Registered Nurse and obtains a certification of clinical advance practice nurse. She is working at the Asan Medical Center, Children's Hospital inpatient unit, Seoul, Korea. She is currently working in a general ward as a dedicated patient safety nurse.

Speaker Publications:

1. "Effect of panchakavya (organic formulation) on phytoremediation of lead and zinc using Zea mays"; Chemosphere / 2020/ DOI: 10.1016/j.chemosphere.2019.125810.
2. "Photo-fermentation of purple sweet potato (Ipomoea batatas L.) using probiotic bacteria and LED lights to yield functionalized bioactive compounds"; 3 Biotech / 2018/ DOI: 10.1007/s13205-018-1327-7.
3. "An investigation of biocontrol activity Pseudomonas and Bacillus strains against Panax ginseng root rot fungal phytopathogens"; Biological Control / 2018/ DOI: 10.1016/j.biocontrol.2018.05.021.

[19th World Congress on Clinical Pediatrics](#), Prague, Czech Republic, April 27-28, 2020, Webinar.

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Biography: