“Based on the findings of our study, we conclude that citrate and heparin locks have similar efficacy in maintaining catheter patency in plasmapheresis patients.” Passero et al (2014).

Reference:


Citrate versus heparin for apheresis catheter locks http://ctt.ec/285L2+ @ivteam #ivteam

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Abstract:

INTRODUCTION: There is a paucity of medical literature regarding the efficacy of lock solutions in preventing catheter thrombosis. Traditionally, heparin has been used as the anticoagulant of choice for catheter locking, but it has many adverse effects associated with its use. Sodium citrate 4% is an attractive alternative to heparin.

METHODS: Our plasmapheresis unit converted to locking all central venous catheters with sodium citrate 4% in place of heparin 100 units/mL in May 2010. We conducted a 2-year period retrospective observational cohort study comparing the outcomes of using heparin versus citrate locks. Outcomes examined were catheter patency, catheter exchanges,
alteplase usage, and catheter infections.

RESULTS: During the study period, 84 patients who underwent a total of 554 plasmapheresis treatments were identified. Flow problems among the citrate treatments were more frequent than those among the heparin group (6.5% vs. 3.2%, P = 0.11, n = 554) but this did not reach statistical significance. The frequency of more severe flow problems requiring catheter exchange or alteplase infusion was higher among the citrate group than the heparin group (3.2% vs. 1.3%, P = 0.11, n = 554). Subgroup analysis, stratified by diagnosis, demonstrated that there was a statistically significant difference in flow problems when comparing myasthenia gravis (MG) patients to non-MG patients. There was no difference in catheter infections between the groups.

CONCLUSIONS: Based on the findings of our study, we conclude that citrate and heparin locks have similar efficacy in maintaining catheter patency in plasmapheresis patients. Further research is needed to examine the differences observed between MG patients versus all other patients.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).
