

The current study aimed to compare the efficacy of normal saline with that of heparinized one to maintain patency of arterial and central venous catheters after cardiac surgery” Ziyaeifard et al (2015).

Abstract:

BACKGROUND: Heparinized saline solution is used to prevent occlusion in the arterial catheters and central venous pressure monitoring catheters. Even at low dose, heparin administration can be associated with serious complications. Normal saline solution can maintain patency of arterial catheters and central venous pressure monitoring catheters.

OBJECTIVES: The current study aimed to compare the efficacy of normal saline with that of heparinized one to maintain patency of arterial and central venous catheters after cardiac surgery.

PATIENTS AND METHODS: In the current randomized controlled trial, 100 patients, with an age range of 18 - 65 years of valve and coronary artery surgery were studied in Rajaie heart center, Tehran, Iran. Patients were randomized to receive either heparinized saline (n = 50) or normal saline flush solutions (n = 50). In the study, arterial catheters and central venous pressure monitoring catheters were daily checked for any signs of occlusion in three postoperative days as primary end-point of the study.

RESULTS: According to the information obtained from the study, four (8%) arterial catheters in the saline group (P value: 0.135) and three (6%) arterial catheters in the heparin group (P value = 0.097) were obstructed. Statistical analysis showed that the incidence of obstruction and changes in all other parameters between the two groups during the three-day follow-up was not significant (all P values > 0.05).

CONCLUSIONS: It seems that there is no difference in the use of heparinized and normal saline solutions to prevent catheter occlusion of arterial and central venous pressure.

Reference:

Ziyaeifard, M., Alizadehasl, A., Aghdaii, N., Sadeghi, A., Azarfarin, R., Masoumi, G. and Golbargian, G. (2015) Heparinized and Saline Solutions in the Maintenance of Arterial and Central Venous Catheters After Cardiac Surgery. *Anesthesiology and Pain Medicine*. 5(4), p.e28056. eCollection 2015.

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