

지속적 신대체요법을 시행하는 환자에서 nafamostat mesilate가 필터의 수명에 미치는 영향

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The Effect of Nafamostat Mesilate in Prolonging Filter Patency with Patients on Continuous Renal Replacement Therapy

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Background: Continuous renal replacement therapy (CRRT) has been considered as an effective modality for renal replacement therapy in hemodynamically unstable patients within intensive care unit (ICU) except for the necessity of anticoagulation. The severity and peculiarities of ICU patients often make it equivocal to use anticoagulation.

Methods: This study is a prospective randomized controlled study to show the difference in filter life span and adverse event between HF1000 (nafamostat mesilate) group and M100 (heparin-free) group. The patients are randomly assigned to each group. Heparin free group use M100 filter, while nafamostat mesilate group use HF1000 filter due to its adsorption in M100 membrane. Baseline characteristics and appropriate laboratory tests were taken from each group.

Results: Seventy-three patients were enrolled in this study, and there were no significant differences between two groups in baseline characteristics. The filter life span and the number of filters used during CRRT were similar in both groups, except the number of filters changed due to clots per 24 hours (1.90 ± 1.60 in M100 group vs. 1.15 ± 0.81 in HF 1000 group; $p=0.040$). However, when the filters were subdivided into filters used less than 12 hours and over 12 hours, filters used over 12 hours were significantly higher in HF1000 group ($p=0.037$, odd ratio 1.840). There were no significant differences in transfusion, mortality within 28 days, and survival between two groups. There were no adverse events that were related to nafamostat mesilate.

Conclusion: Nafamostat mesilate can be an effective and safe anticoagulation method in patients with high risk of bleeding without causing major bleeding complication.

Key Words: 지속적 신대체 요법, 후탄, 헤파린
CRRT, Nafamostat mesilate, Heparin