

Evaluation of Coagulation State in Patients with End Stage Renal Disease (ESRD) by Thromboelastogram (TEG)

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Abstract : Background: Coagulopathy is one of the complications with end stage renal disease with high prevalence in the world. Thromboelastogram is a dynamic test for evaluation of coagulopathy and we have compared our patient's coagulation profiles with the results of TEG. Material and methods: In this study 50 patients with ESRD who were on regular hemodialysis for at least 6 months were selected with simple sampling and their coagulation profile was done with blood sampling and also TEG was done for every patient. Data were analyzed with SPSS and $P < 0.05$ considered significant. Results: Protein S, Protein C and Antithrombin III deficiency was detected in 32%, 16% and 20% of patients and activated protein C resistance was abnormal in 2% of patients. In TEG, R time in 49% and K in 22/5% of patients was lower than normal and α -angle in 26% and maximum amplitude in 36% of patients was upper than normal (Hypercoagulable state). PS with R and ATIII with K have correlation. Conclusion: R time and K in TEG can be a suitable screening test in patients with suspicion of PS and ATIII deficiency.

Keywords : thromboelastography, chronic kidney disease, Coagulating disorder, hemodialysis

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