

## COAGULATION DISORDERS AFTER TRAUMATIC BRAIN INJURY

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Isolated traumatic brain injury (TBI) is often associated with abnormalities in coagulation parameters. Prehospital fluids exceeding 2,000 ml may be associated with coagulation disorders in patients with TBI. The aim of this study was to investigate the incidence of coagulation disorders, to establish its relation to the outcome, and to establish a correlation between prehospital fluid infusion and development of coagulation disorders.

The study included 82 patients with isolated brain injury. Coagulation parameters were determined using the values of prothrombin time (PT), activated partial thromboplastin time (APPT) and platelet count. We also analyzed a correlation between prehospital administered fluid and the occurrence of coagulopathy.

Pearson's correlation analysis showed that in terms of survival, there was no significant difference between the groups (group A OR 37 CI 0.11-1,27; group B OR 0,48 CI 0,16-1,49; group C OR 0,69, CI 0,24-1,98), but it also indicated that prehospital fluid administered in a larger amount was in a negative correlation with the treatment outcome (-0,240).

The results of our studies have confirmed the correlation of coagulation abnormalities with the lethal outcome in patients with TBI. Administration of more than 1,500 ml of fluid is associated with more frequent occurrence of coagulation disorders and with poor outcome.

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**Key words:** *traumatic brain injury, coagulation disorders*