



cells in Parkinson's disease and other neurodegenerative diseases,

including Alzheimer's disease.

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**POSTTRAUMATIC COAGULOPATHY IN PATIENTS WITH THE SEVERE COMBINED THORACIC TRAUMA.**

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**Introduction.** Thoracic trauma is one of the leading causes of morbidity and mortality in developing countries. Coagulation is an integral part of inflammation and widespread activation of coagulation results in the systemic inflammatory response syndrome and increased susceptibility to sepsis.

**Aim.** The aim of this study was to determine the diagnostic value of the coagulopathy markers for metabolic monitoring of the severe combined thoracic trauma and it's possibly of outcome prediction.

**Materials and methods.** 73 male patients aged from 20 to 68 with the severe blunt combined thoracic trauma with pneumothoraxes, hemothoraxes, lung contusions, heart contusions and multiply rib fractures were included in this study. Patients' examinations were performed on 1-2-d, 3-4-th and 5-6-th day after trauma. The prothrombin time, fibrinogen concentration and  $\beta$ -

Naphthol test were used for coagulation monitoring.

**Results.** Reliable decrease of fibrinogen concentration in comparison with control group was found on the 1-2-d day after trauma in both survivors and nonsurvivors. Further analysis showed that on the 3-4-th day of posttraumatic period the level of fibrinogen concentration continue decrease in comparison to control group. The more expressed level of decrease on the 5-6-th day was for survivors.

The level of the prothrombin time increase was on 10.41% for the 1-2-d day, on 7.89% for the 3-4-th day and on 10.15% for the 5-6-th day after trauma for patients from survivor group. It's dynamic in patients from nonsurvivors group characterized by gradual increase from the 1-2-d day.

There were significant correlations between prothrombin time estimated on 1-2-d day after trauma and objective scales that characterise patient's status on



admission RTS scale and TRISS probability. Less significant correlations were between fibrinogen concentration on 1-2-d day and these trauma objective scales.

There were significant differences in  $\beta$ -Naphthol test on 1-2-d and 5-6-th days after trauma between two groups of patient, more expressed on 5-6-th day. Appearance of positive and strongly positive  $\beta$ -Naphthol test on 5-6-th day after trauma increases probable mortality from 18.47 – 19.37% to 26.91 – 28.08%.

**Conclusions.** Hypocoagulation occurs early from the 1-2-d day of trauma in equal extent for both groups of patients with the severe combined thoracic trauma. Coagulation abnormalities are the result of vital functions disturbances (the level of traumatic shock) rather than direct mechanical tissue injury. Disseminated intravascular coagulation with a fibrinolytic phenotype at an early phase of trauma is the predominant and initiative pathogenesis of trauma-related coagulopathy with maximal expression on 5-6-th day of posttraumatic period.

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### **THE CRANIOMETRY OF THE SKULL VAULT AT ADULT PEOPLE**

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**Actuality.** The vault of skull (fornix) is the roof of the head and brain, brain forming protection and vital structures located there in. A number of authors studied the characteristics of the structure of the skull, its bone formation, considered in the age and the individual aspects, will highlight a science – craniology. We should not forget that the cranial vault is the main field for surgical approaches to different parts of the brain, in which are carried out and a burr hole formed the necessary different shapes and sizes.

**The aim** of research is determine a range of main linear parameters of vault of skull at adult people, from the standpoint of the doctrine of individual anatomical variability. The study carried out on 40 specimens of skulls of adults using conventional techniques of craniometric researches.

**Materials and methods.** The vault of skull has a pronounced longitudinal range of parameters in adults. So, the main length of the cranial vault corresponds to the length of the skull and the distance