Questions of the prognostic value of signaling markers (peptidiolarginine deiminase 4) in patients with ischemic stroke in Tashkent

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The data on admission of patients with ischemic stroke (IS) determine the tactics and adjustments in treatment methods and these factors play a special role in the management of stroke patients.

Objective: to study the prognostic efficacy of peptidylarginine deiminase 4 (PAD4), an enzyme necessary for the formation of intra-renal neutrophil extracellular traps (NET). It is activated in the periischemic brain and its overexpression causes an increase in NET formation, which is accompanied by a decrease in neovascularization and an increase in BBB damage.

Materials and methods: Since IS prevailed in the structure of strokes (up to 80%), patients with this type of stroke were the object of the study. They were divided into the main group, which had additions to standard therapy depending on the PAD4 index (n=48), and the control group (n=43) with only standard therapy. The criterion for inclusion of patients in the study was IS, confirmed by MSCT of the brain.

The results of the study. When analyzing the study of patients in age groups, it was found that the average age of patients in the main group was 63.2 (52-74) years and in the control group 64.9 (53-78) years. Standard treatment was prescribed to patients of both groups, in the main group some patients with an established high index of PAD4 in combination with its inhibitor.

After 6 months of rehabilitation, it was revealed that in 70.8% of the main group of patients with high PAD4 values and to whom corrective actions were applied in treatment, respectively, the proportion of patients with better recovery rates was significantly higher than in the control group.

Conclusions: The results of the conducted studies indicate the possibility of using PAD4 indicators in the need for complex therapy of patients with acute IS.