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Conclusions: The relationship between monitoring VKAs and their safety balance is proven. The exponential increase in studies evaluating health-related quality of life as an important outcome in anticoagulated patients has shown that monitoring these patients leads to more anticoagulation stability, lower incidence of bleeding, and less ischemic events. The structure of the leading risk factors was defined among patients with atrial fibrillation. The treatment of new oral anticoagulants allows us to assign them without special control laboratory control.

THE RELATIONSHIP BETWEEN OBESITY AND PLASMINOGEN ACTIVATOR INHIBITOR 1 TYPE PLASMA LEVELS IN PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY

Towenna C.A., 5th year student

Scientific adviser – Kmyta O.P.

Medical Institute of Sumy State University, Department of Neurosurgery and Neurology

Plasminogen activator inhibitor 1 type (PAI-1) is the principal inhibitor of fibrinolysis. The production of PAI-1 by adipose tissue could be an important contributor to the elevated PAI-1 plasma levels.

Our study was aimed to analyze the relationship between obesity and PAI-1 plasma levels in patients with severe traumatic brain injury (STBI).

214 subjects have been examined. They were grouped into two categories: 1st group contained 119 patients with STBI, 2^d (control) – 95 almost healthy individuals. Patient in each group were subgrouped according to their body mass index (BMI) and waist-hip ratio (WHR). We checked their PAI-1 plasma levels on the 1, 3, 7 and 14 days after hospitalization.

During the 1st day study, higher PAI-1 levels were reported to have association with obesity and STBI (119.1 ± 2.51 , normal body weight (NBW) – 111.7 ± 1.45 ng/ml, $p=0.042$). Moreover, in the control group higher PAI-1 level were recorded in obese subjects (52.3 ± 0.86 , NBW – 25.4 ± 1.0 ng/ml, $p=0.0001$) Thus, the association between obesity and increased PAI-1 level was still obvious on the 3^d day study, levels of PAI-1 didn't change much in patients with STBI. The analysis of PAI-1 levels in STBI patients on the 7th day showed that the association remained significant between obesity and elevated PAI-1 level trending to decrease (98.3 ± 5.61 , NBW – 70.1 ± 3.86 ng/ml, $p=0.005$), but was almost 2 times higher than that in the control group. PAI-1 levels in the subjects with STBI decreased slowly, independently of the BMI and WHR. Analyzing PAI-1 level on the 14th day, it was recorded that in the patients with STBI and NBW the PAI-1 level (56.2 ± 3.98 ng/ml) was 2 times higher (according to the values in the control group); the patients with obesity and overweight still had high values (87.9 ± 8.0 ng/ml) – level of PAI-1 was 1.7 times higher than that in the control group ($p=0.004$).

According to the results of the study, we can make a conclusion as for the association between changes in the plasma PAI-1 levels and body weight: PAI-1 values were significantly higher in the patients and control with obesity than in the patients with NBW, thus we can suggest the influence of overweight and obesity upon STBI course.