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E-Poster Viewing

AS33. GENETICS, 'OMICS AND BIOMARKERS

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ROLE OF S100B PROTEINE IN ISCHEMIC STROKE IN CHILDREN

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Group Name:**Background And Aims:**

BACKGROUND: The S100B protein is the most studied biomarker in ischemic stroke (IS), involved in cellular differentiation, cell cycle progression, and in inhibiting apoptosis. S100B protein promotes neurogenesis, neuronal plasticity and having neuromodulatory properties. **PURPOSE:** evaluation of serum levels of S100B protein in the acute period and after one year following IS in children to determine its role in neuroinflammatory and neuromodulating processes.

Methods: Were investigated 54 children with SI aged from 4 weeks to 10 years. The diagnosis of IS was established using imaging. S100B protein was determined in samples of blood serum within the first 3 days and after one year after IS, the results compared with data from 35 healthy children.

Results: Values of S100B protein in serum were elevated in the acute period of IS compared to healthy children. We also found low serum levels of S100B protein after one year after IS in children with paresis, paralysis, and epilepsy, compared to healthy children. S100B protein in serum was much higher in the acute period of IS compared to the recovery period.

Conclusions: Significant increasing of S100B protein values in the acute period of IS in children suggests the severity of condition or the presence of neuroinflammation, and also the neuroprotective role of this protein. Persistence of high level of S100B protein one year after IS confirms its neuromodulatory effect. The obtained result shows the role of S100B protein as biomarker of neuroinflammation and neuroprotection.

Trial Registration Number: