

SERUM LEVELS OF S100B PROTEINS AS A MARKER OF POSITIVE PSYCHOPATHOLOGY IN SCHIZOPHRENIC INPATIENTS

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Introduction: Schizophrenia is a chronic disease. Several etiopathogenic aetiologies have been posed, among them the existence of cerebral inflammation. S100B is a calcium-binding protein, mainly produced and secreted by astrocytes, that mediates the interaction among glial cells and between glial cells and neurons. Serum S100B levels have been proposed as a peripheral marker of brain inflammation.

Objectives: The aim of this research is to study if the serum level of the protein S100B has relationship with positive psychopathology.

Methods: 31 paranoid schizophrenic inpatients (22 male and 9 female, 36.7±10.3 years) meeting DSM-IV criteria participated in the study. Blood was sampled by venipuncture at 12:00 and 24:00 hours. Blood extractions were carried out during the first 48 hours after hospital admission. Psychopathology was assessed by the Positive and Negative Syndrome Scale (PANSS). Serum S100B levels were measured by sandwich ELISA techniques.

Results: Correlations between serum levels of S100B protein and PANSS positive scores are shown in the following table. The first figure corresponds to the Pearson’s correlation coefficient, while the figure in brackets corresponds to its statistical significance.

S100B	Total Positive Score	Delusions	Conceptual disorganization	Hallucinations	Hyperactivity	Grandiosity	Suspiciousness/persecution	Hostility
12:00	0.354 (0.051)	0.210 (0.249)	0.291 (0.106)	0.412 (0.019)	-0.128 (0.486)	0.274 (0.135)	0.010 (0.957)	0.026 (0.887)
24:00	0.462 (0.009)	0.266 (0.141)	0.446 (0.011)	0.345 (0.053)	-0.148 (0.419)	0.486 (0.006)	0.064 (0.728)	0.013 (0.942)

[panss]

Conclusions: Serum levels of S100B protein may be used as a biological marker of positive psychopathology in paranoid schizophrenia.

Acknowledgement: This study was partly supported by a grant (PI: 08/115) of the Fundacion Canaria de Investigacion y Salud (FUNCIS).