

CLINICAL PREDICTIVE VALUE OF S100 PROTEIN - ZADAR GENERAL HOSPITAL EXPERIENCE

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In order to improve traumatic injury diagnostics and reduce unnecessary computerized tomography (CT) scan use, following trends in neurosurgery and emergency medicine, Zadar General Hospital in mid 2014 introduced serum measurement of S100B protein. S100B is a small protein predominantly expressed by central nervous cells, mainly astrocytes. It is probably the most studied bio-marker of cerebral damage in traumatic brain injury. Aim of this study is to assess usability of marker in clinical environment. Number of 252 patients admitted in Department of Emergency Medicine with traumatic brain injury fulfilled the criteria: Glasgow Coma Scale 13-15, traumatic brain injury within three hours of the event. A venous blood sample was used for determining value of S100B, and cut off value was set at 0,105 mcg/L. Results of the study revealed that In spite of some shortcomings S100B can be used as a useful screening and prediction method for patients with traumatic brain injury.

Keywords: S100B, traumatic brain injury, CT