

***Impact Of Body Temperature And Serum Procalcitonin On Outcome In
Critically Ill Neurological Patients***

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ABSTRACT

Introduction:Hyperthermia is common in patients with acute stroke and most of the time is due to infectious complications. PCT in stroke patient: Inflammatory response is a principal early component in the pathophysiology of stroke Serum procalcitonin (PCT) a marker of septicemia and infection severity -has also been proposed as an indicator of systemic inflammatory response in noninfectious situations

The induction of PCT in patients suffering from trauma. PCT increased only moderately in most patients and peaked at day 1–2 after trauma, the concentration

Aim of the Work: The purpose of this study is to test the hypothesis that hyperthermia and increased serum procalcitonin are associated with poor outcome after neurological injury.

Patients and Methods: Study was conducted on fifty patients (30 male and 20 female) admitted to the neurocritical, unit.

Results: Study was conducted on 50 neurocritical patients collected from the neurocritical unit in EL-Kasr ELAni university hospital. They were divided into two groups.

Group I: Traumatic brain injury (25 patients), **Group II:** Non traumatic brain insult (e.g. stroke), (25 patients). There was a higher mortality among patients of group II 23/25 vs 12/25 in group I with significant p value: 0.001

Conclusion:Hyperthermia has a strong link to increased length of intensive care unit (ICU) and hospital stay, higher mortality, and worse overall outcome. Procalcitonin levels is was significantly high in group II (stroke patients) compared to group I (traumatic patient)..

Kew words: Serum procalcitonin, PCT, Hyperthermia