**Original article:**

**Biochemical parameters in differentiating parenchymal solitary granular neurocysticercosis from intracranial tuberculoma-a pilot study.**

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**Abstract**

**Background**: In India neurocysticercosis, caused by the larvae of the helminth, Taenia solium is considered to be the most common parasitic infestation of the central nervous system. A large majority of patients with this disease have single small enhancing CT lesions (SSECTL). This study was undertaken to evaluate the effectiveness of biochemical parameters in differentiating single small enhancing parenchymal CT lesion presumably of neurocysticercosis from tuberculoma. **Materials and methods:**  A total of forty patients between 10-50 years of age, comprising of twenty patients with a probable diagnosis of neurocysticercosis based on the revised criteria of Del Brutto et al, and 20 patients with a probable diagnosis of tuberculoma were selected from the inpatient wards of the departments of paediatrics and general medicine of Alluri Sitaramaraju Academy of Medical Sciences -Eluru. Cerebrospinal fluid analysis for glucose, protein and adenosine deaminase was done **Results:** There was a statistically significant difference in the mean cerebrospinal fluid adenosine deaminase levels in patients with neurocysticercosis,1.56±0.62U/l versus tuberculoma 19.65±3.21U/l (p<0.0001), and also a significant difference in the mean cerebrospinal fluid protein concentrations between the two groups, the values being 36.45±15.47mg/dl and 82.8±13.15mg/dl respectively,(p<0.0001).

**Conclusion:** Biochemical parameters like cerebrospinal fluid adenosine deaminase and proteins can be used to differentiate between the two conditions.

**Key words:** Neurocysticercosis, intracranial tuberculoma, adenosine deaminase