

## **CEREBROSPINAL FLUID FREE SIALIC ACID AND ASPARTATE TRANSAMINASE LEVELS IN MENINGITIS**

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### **ABSTRACT**

**Background:** Sialic acid (SA) is a nine carbon sugar derived from mannosamine and pyruvate. High levels of sialic acid and aspartate transaminase (AST) levels in cerebrospinal fluid have been described in pyogenic meningitis (PM) compared to tubercular meningitis (TBM).

**Objectives:** To evaluate the levels of CSF free SA in PM and TBM and to assess the correlation between CSF free SA and CSF glucose or total protein levels.

**Patients and Methods:** A total of 122 subjects were studied and divided into children and adults. Further, these have been subdivided into controls, PM and TBM. CSF free SA was estimated by thiobarbituric acid assay of Warren and AST by Reitmann and Frankel method.

**Results:** CSF free SA and AST levels in children and adults were significantly high in PM ( $p < 0.001$ ) as compared to TBM and controls.

**Conclusion:** A very high CSF free SA and AST were found to be characteristic of PM, making them useful parameters to differentiate PM from TBM.

### **KEY WORDS**

*Meningitis, Free Sialic Acid.*

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