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Inflammatory mediators in human epilepsy: a systematic review and meta-analysis

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Highlights

- A total of 66 articles on inflammation and epilepsy were systematically analyzed.
- A meta-analysis revealed elevated levels of serum IL-6, IL-17 and CSF IL-1 β , IL-10.
- There is substantial overlap between findings in serum, CSF and brain tissue.
- Many different chemokines were found elevated in brain tissue.
- Future studies should explore the use of targeted anti-cytokine therapies.

Abstract

Background: Accumulating evidence suggests a role for inflammation in the pathophysiology of epilepsy.

Methods: We performed a systematic review and meta-analysis of studies that investigated inflammatory mediators in human epilepsy. Studies reporting on inflammatory mediators in serum,

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