Anti-Inflammatory Treatment in Children with Refractory Seizure

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Abstract

Epilepsy is a neurological disease of the central nervous system. It is estimated that about 50-70 million people worldwide suffer from this chronic disorder and 20 to 30% are resistant to conventional anti-epileptic drugs. In the epilepsy therapeutic arena, there is real need for developing novel antiepileptogenesis treatments that offer a way to prevent the onset or the progression of the disease. Such treatments are still lacking. Numerous experimental and clinical findings demonstrate that brain inflammation plays a key role in the generation of seizures and the pathogenesis of epilepsy. Some conventional corticosteroid therapies are used for seizures in infantile spasms, lafora disease and Rasmussen syndrome. There are some herbal drugs that have anti-inflammatory effects but small side effects, like curcumin. Curcumin is the active component of turmeric which is used in everyday cooking. Molecular investigations reveal that curcumin has anti-inflammatory, antimicrobial, anti-hepatotoxic and anti-hyperlipidemic effects. Curcumin has recently been reported to have anticonvulsant effects in several animal models of epilepsy and in our investigation, has effect on refractory myoclonic seizures in children with no significant side effect.

Keywords: Refractory seizure, Anti-inflammatory treatment, Curcumin

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