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## Poster Presentation

### Use of Stem Cell Therapy for Treatment of Temporal Lobe Epilepsy (TLE)

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#### **Abstract**

Epilepsy is one of the most common neuroinflammatory disorders that affect more than 50 million people worldwide. Excessive electrical discharges in neurons following neural cell damage or loss leads to recurrent seizures, which are described as epilepsy. One of the most common and difficult to treat types of epilepsy is Temporal Lobe Epilepsy (TLE), which results from hippocampal sclerosis. Currently, drug therapy is one of the most used treatments for epilepsy, but anti-epileptic drugs can induce undesirable side effects and are not effective in all TLE patients. Therefore, developing new treatments for TLE is necessary. Recently, some studies have surveyed the use of stem cells for treatment of TLE. Stem cells have numerous significant advantages over current drug therapies for epilepsy. Researchers have used various stem cells in animal models for treatment of TLE, but there is no conclusive evidence in support of using stem cells for treating TLE yet. However it is important to acknowledge that this field is still in infancy, and the initial studies are promising. Thus, we suggest more researches need to be done on the use of stem cells for treatment of TLE.

**Keywords:** Temporal lobe epilepsy, Epilepsy, Stem cell, Stem cell therapy

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