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Australia presents novel study to help kids with severe epilepsy

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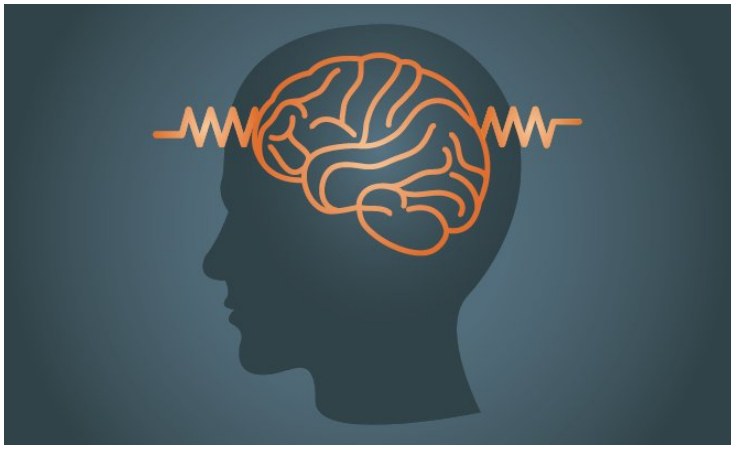
The disorder affects brain development, which means these children also have impaired motor skills and severe intellectual disabilities



New research from the University of South Australia could deliver a breakthrough for children suffering from one of the most severe forms of genetic epilepsy, reducing the frequency of their seizures and improving their quality of life.

Malignant migrating partial seizures in infancy (MMPSI) is a childhood epilepsy most commonly caused by mutations in the KCNT1 gene – a gene responsible for regulating neuron activity in the central neural system. Children with this genetic condition are very unwell and can suffer up to 100 epileptic seizures a day.

There is no cure or current therapy to relieve the condition and the research aims to change this.

Funded by the Channel 7 Children's Research Foundation, researchers will work with European collaborators to investigate a range of drugs flagged as possible options for children with MMPSI, testing their effectiveness on reducing seizures.

A significant advantage of the study is the eight drugs within the study are already FDA-approved, which means the need for lengthy and costly clinical trials to prove the drugs' safety and efficacy are eliminated.

"The non-seizure drug Quinidine has been trialled in a number of children, but with little improvement, so there's an acute need for new drugs to treat children with KCNT1 mutations", said the researchers.