Cannabis-based compound may reduce seizures in children with epilepsy

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Generalized 3 Hz spike and wave discharges in a child with childhood absence epilepsy. Credit: Wikipedia.

Interest has been growing in the use of cannabinoids—the active chemicals in cannabis or marijuana— for the treatment of epilepsy in children. A recent *Epilepsia* analysis of relevant published studies indicates that this strategy looks promising.

The analysis included four randomized controlled trials and 19 non-randomized studies, primarily involving cannabidiol, a particular type of cannabinoid that does not have psychoactive effects.

Among randomized controlled trials involving children with severe forms of epilepsy, there was no statistically significant difference between cannabidiol and placebo in terms of freedom from seizures, sleep disruption, or vomiting. There was a statistically significant reduction in the median frequency of monthly seizures with cannabidiol compared with placebo and an increase in number of participants with at least a 50 percent reduction in seizures.

"Although we saw no significant difference in the number of children who became completely seizure free, we that found a significant number of these children achieved a 50 percent or more reduction in seizures. Any reduction in seizures has a striking impact on the lives of these children and their families," said lead author Jesse Elliott, of the University of Ottawa, in Canada. "Research in this area is active, and we expect a dramatic increase in the number of studies over the next few years."

More information: Jesse Elliott et al, Cannabis-based products for pediatric epilepsy: A systematic review, *Epilepsia* (2018). DOI: 10.1111/epi.14608

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