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## Levetiracetam/topiramate

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## Drug ineffective: case report

An infant girl exhibited drug ineffectiveness while receiving levetiracetam and topiramate for focal seizures [routes and dosages not stated].

The girl was born at 38 weeks' of gestation with intrauterine growth restriction. At 7 months of age, she presented with focal febrile status epilepticus (seizures) lasting 1.5 hour in association with adenovirus, coronavirus and rhinovirus infections. Also, she had a history of developmental delay, and orofacial dyskinesia starting from 6 weeks of age. After 7 months of age, she had monthly focal seizures of febrile and afebrile type. Most seizures occurred in clusters and some were 15–20 minutes in duration. She received levetiracetam and topiramate; but, no improvement was noted indicating drug ineffectiveness.

Thereafter, the girl started receiving carbamazepine and clobazam. Following this, her seizures were well controlled and no seizures were noted at 17 months of age. At 18 months of age, progressive diffuse cerebral atrophy with prominent sulci, loss of white matter and possible delayed myelination were noted. Further, she continued to make slow developmental progress. Further, genetic and functional testing demonstrated heterozygous variants in QARS1 indicating QARS1-associated epileptic encephalopathy.

Chan DL, et al. A case of QARS1 associated epileptic encephalopathy and review of epilepsy in aminoacyl-tRNA synthetase disorders. Brain and Development 44: 142-147, No. 2, Feb 2022. Available from: URL: http://doi.org/10.1016/j.braindev.2021.10.009