

Limited evidence for benefits of prophylactic drug treatment for febrile seizures

Clinical Question	How effective are antiepileptic and antipyretic drugs used prophylactically to treat children with febrile seizures?
Bottom Line	<p>Intermittent diazepam and continuous phenobarbitone reduced recurrence rates for children with febrile seizures (NNT* 5-14), but with adverse effects in up to 30%. There was no significant benefit for intermittent phenobarbitone, phenytoin, valproate, pyridoxine, ibuprofen or zinc sulphate versus placebo or no treatment; nor for diclofenac versus placebo followed by ibuprofen, acetaminophen or placebo; nor for continuous phenobarbitone versus diazepam, intermittent rectal diazepam versus intermittent valproate, or oral diazepam versus clobazam. Given the benign nature of recurrent febrile seizures, and the high prevalence of adverse effects of these drugs, parents and families should be supported with adequate contact details of medical services and information on recurrence, first aid management and, most importantly, the benign nature of the phenomenon.</p> <p><i>*NNT = number needed to treat to benefit one individual.</i></p>
Caveat	<p>Most of the reviewed antiepileptic drug trials were of a methodological quality graded as low or very low. Methods of randomisation and allocation concealment often did not meet current standards. Treatment versus no treatment was more commonly seen than treatment versus placebo, leading to obvious risks of bias. Trials of antipyretics and zinc were of higher quality.</p>
Context	<p>Febrile seizures occurring in a child older than one month during an episode of fever affect 2% to 4% of children in Great Britain and the United States and recur in 30%. Rapid-acting antiepileptics and antipyretics given during subsequent fever episodes have been used to avoid the adverse effects of continuous antiepileptic drugs.</p>
Cochrane Systematic Review	<p>Offringa M et al. Prophylactic drug management for febrile seizures in children. Cochrane Reviews, 2017, Issue 2. Art. No.: CD003031.DOI: 10.1002/14651858. CD003031.pub3. This review contains 30 studies involving 4,256 participants.</p>
