COCHRANE PRIMARY HEALTH CARE FIELD

PEARLS Practical Evidence About Real Life Situations

No evidence for antiepileptic drugs preventing seizures in people with brain tumours

Clinical question	How effective and safe are antiepileptics in preventing seizures in people with brain tumours?
Bottom line	Compared to placebo or no treatment, the antiepileptic drugs phenytoin, phenobarbital and divalproex sodium, were no more effective or were less effective in preventing a first seizure in 404 people with brain tumours.
Caveat	The risk of adverse effects, such as nausea, skin rash, sore gums, myelosuppression, vertigo, blurred vision, tremor and gait unsteadiness was higher for those taking antiepileptic drugs (NNH* 3). No studies were identified evaluating use of newer antiepileptic drugs. Antiepileptic drugs can also interact with chemotherapy agents and steroids. NNH = number needed to treat to cause harm in one individual.
Context	Up to 60% of people with brain tumours may present with seizures, or may have a seizure for the first time after diagnosis or neurosurgery. The risk of seizures varies with the tumour type and tumour location in the brain. Seizures have a negative impact on quality of life, affecting activities of daily living, independence, work and driving.
Cochrane Systematic Review	Tremont-Lukats IW et al. Antiepileptic drugs for preventing seizures in people with brain tumours. Cochrane Reviews 2008, Issue 2. Art. No.:CD004424. DOI: 10.1002/14651858. CD004424.pub2. This review contains five trials involving 404 participants.
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