

## PREVIOUS PROLONGED CLONIC SEIZURES DIMINISH ANTIEPILEPTIC ACTIVITY OF VALPROATE AGAINST PENTETRAZOL-EVOKED CONVULSIONS

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Prolonged seizures may alter the brain function in numerous ways. It is conceivable that they might lead to modifications of seizure susceptibility or anticonvulsive drug efficacy, however, only limited data address this issue. Therefore, we have decided to estimate the antiepileptic activity of drugs interfering with GABA-ergic neurotransmission in mice subjected to prolonged clonic seizures 2 weeks before, using pentetrazol test. The activity of valproate, but not diazepam or phenobarbital, was diminished in animals following repetitive clonic seizures. It might be hypothesized that in humans suffering from epilepsy, prolonged seizures in the past might contribute to the lowered efficacy of valproic acid later on.

**Key words:** *prolonged seizures, antiepileptic drugs, valproate, phenobarbital, diazepam*