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**Review**

## Non-epilepsy uses of antiepileptic drugs

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**Abstract:**

Antiepileptic drugs (AEDs) affect various neurotransmitters (i.e. GABA, glutamate), receptors (i.e. GABAergic, glutamatergic), and ion channels (i.e. for sodium or calcium) which is responsible for their anticonvulsant activity. However, this broad spectrum of action may be also utilized in other pathological conditions. For example, both conventional and newer AEDs may be used in patients suffering from neuropathic pain, migraine, essential tremor, spasticity, restless legs syndrome and a number of psychiatric disorders (f.e. bipolar disease or schizophrenia). Also, isolated data point to their potential use in Parkinson's or Alzheimer's disease. There is experimental background indicating a potent neuroprotective efficacy of AEDs in numerous models of brain ischemia. However, the clinical data are very limited and this problem requires careful assessment.

**Key words:**

antiepileptic drugs, bipolar disorder, migraine, neuropathic pain, neuroprotection

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