REVIEW

REMACEMIDE – A NOVEL POTENTIAL ANTIEPILEPTIC DRUG

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Epilepsy belongs to common diseases of the brain. It affects approximately 1% of the population. The aim of epilepsy therapy is to keep the patient free of seizures without interfering with normal brain function. Unfortunately, about 30% of all epilepsies remain without control. In this situation patients require polytherapy which is usually a combination of antiepileptic drugs (AEDs) acting via different mechanisms of action. Many potential AEDs have been developed but the proportion of patients failing to respond to drug treatment has not been fundamentally changed. The aim of this review was to assemble current literature data on remacemide, a novel AED, which is suggested for the treatment of epilepsy. Remacemide hydrochloride is a low-affinity NMDA receptor blocker as well as Na⁺ fast-channel blocker. The drug exerts anticonvulsant activity both in various animal seizure models and in clinical studies. In addition to its antiseizure properties, the drug seems to provide neuroprotection. Remacemide holds promise to serve as neuroprotectant not only in seizures but perhaps in other neurodegenerative conditions in humans as well.

Key words: remacemide, antiepileptic drugs, seizures, refractory epilepsy, neuroprotection