



Short communication

Kynurenic acid: a new effector of valproate action?

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Abstract:

We investigated the changes in hippocampal kynurenic acid (KYNA) concentrations and the amino acids involved in neuronal activity regulation following valproate (VPA) administration (400 mg/kg *ip*) in pentylenetetrazole-kindled rats (*in vivo*). We found a remarkably long-lasting increase in KYNA levels following VPA administration, and this effect correlated with a rise in GABA levels. No changes in the concentration of other analyzed amino acids were present. It is likely that the antiepileptic and neuroprotective properties of VPA may also be a consequence of an increase in the hippocampal KYNA concentration.

Key words:

PTZ-kindling, microdialysis, valproate, kynurenic acid, GABA, steady state, epilepsy, neuroprotection
