33° Congresso Nazionale della Società Italiana di Farmacologia Cagliari, 6-9 Giugno 2007

HIGH HOMOCYSTEINE PLASMA LEVELS IN PATIENTS TREATED WITH ANTIEPILEPTIC DRUGS

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Homocysteine (tHCY) is both a risk factor for cerebrovascular disease and an experimental convulsant agent. We analysed the tHCY plasma levels in epileptic patients treated with antiepileptic drugs. The tHCY plasma concentrations was significantly increase in treated patients respect to controls ($14.8 \pm 1.8 \text{ vs } 8.7 \pm 2.0 \mu\text{M}$; p=0,002). Folate plasma concentration was different in treated patients and controls ($11.3 \pm 1.5 \text{ vs } 17.9 \pm 1.0 \text{ nM}$; p<0,05), whereas serum vitamine B12 levels were the same. These data suggested that a long-term therapy with antiepileptic drugs could be able to increase both plasma tHCY and serum folate levels. So, we hypothesize that a vitamin supplementation in patients treated with anticonvulsant drugs could be able to decrease the plasma tHCY levels of with clinical benefits effects.