EFFECT OF L-ACETYL CARNITINE ON ACUTE ISCHAEMIC STROKE RECOVERY

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Abstract

The aim of the study was to asses the safety of a clinical trial on the effect of L-acetyl carnitine on acute ischaemic stroke.Ischemic and hypoxic brain injury caused by stroke leads to morbidity and mortality in thousands of patients in Albania each year. The quest for new neuroprotective drugs has done that many investigators around the world have turned their attention to compounds that are normally present in humans and be administered at relatively high doses without evidence of toxicity.A pilot clinical trial of L-acetyl carnitine was conducted from December 2011 to December 2012. Twenty patients with a computed tomography verified diagnosis of acute ischaemic stoke in the territory of MCA, who could receive drug treatment within 48 h of stroke onset, were included. The patients with >4 point of National Institute of Health Stroke Scale (NIHSS) were randomly allocated to receive either 1.5g L-acetyl carnitine or placebo. For follow-up, NIHSS on day 2,7,14,30,60 and Rankin scale at day 60 were applied. No significant adverse effects were seen. The NIHS score was better in the L-acetyl carnitine treated group at 3 months of follow-up and they had a faster stroke recovery.The patients had a marked degree of functional recovery,as well as improved mood and attention condition. Also L-acetyl-carnitine was a beneficialin maintaining healthy blood cholesterol and triglyceride levels.First results of this pilot trial are promising and other research to define the role of L-acetyl-carnitine as a neuroprotective drug.

Keywords*:clinical trial, L-acetyl carnitine, stroke.*