Efficacy of intravenous magnesium in neuropathic pain.

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Abstract

BACKGROUND: Postherpetic neuralgia is a complication of acute herpes zoster characterized by severe pain and paraesthesia in the skin area affected by the initial infection. There is evidence that the N-methyl-D-aspartate receptor is involved in the development of hypersensitivity states and it is known that magnesium blocks the N-methyl-D-aspartate receptor.

METHOD: A double-blind, placebo-controlled, cross-over study was conducted in which magnesium sulphate was administered as an i.v. infusion. Spontaneous pain was recorded and qualitative sensory testing with cotton wool was performed in seven patients with postherpetic neuralgia before and after the i.v. administration of either magnesium sulphate 30 mg kg⁻¹ or saline.

RESULTS: During the administration, pain scores were significantly lower for magnesium compared with placebo at 20 and 30 min (P=0.016) but not at 10 min. I.V. magnesium sulphate was safe, well-tolerated and effective in patients with postherpetic neuralgia.

CONCLUSION: The present study supports the concept that the N-methyl-D-aspartate receptor is involved in the control of postherpetic neuralgia.

Comment in

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