

Nimodipine for traumatic subarachnoid hemorrhage

In a Cochrane review of randomised controlled trials of calcium channel blockers in acute traumatic head injury patients shows that considerable uncertainty remains over their effects. The effect of [nimodipine](#) in a subgroup of brain injury patients with subarachnoid haemorrhage shows a beneficial effect, though the increase in adverse reactions suffered by the intervention group may mean that the drug is harmful for some patients ¹⁾.

Vergouwen et al, do not lend support to the finding of a beneficial effect of nimodipine on outcome in patients with traumatic subarachnoid haemorrhage as reported in an earlier Cochrane review ²⁾.

Conti et al, describes of a patient with symptomatic and angiographically documented vasospasm following traumatic SAH which was refractory to maximal medical therapy and successfully treated with intra-arterial infusion of Nimodipine ³⁾.

A prospective, randomized, double-blind, placebo-controlled study of nimodipine used to treat traumatic subarachnoid hemorrhage (tSAH) was conducted in 21 German neurosurgical centers between January 1994 and April 1995. One hundred twenty-three patients with tSAH appearing on initial computerized tomography (CT) scanning were entered into the study. Requirements for inclusion included age between 16 and 70 and admission into the study within 12 hours after head injury, regardless of the patient's level of consciousness. Eligible patients received either a sequential course of intravenous and oral nimodipine or placebo treatment for 3 weeks. Patients were closely monitored using clinical neurology, computerized tomography, laboratory, and transcranial Doppler ultrasound parameters. Patients treated with nimodipine had a significantly less unfavorable outcome (death, vegetative survival, or severe disability) at 6 months than placebo-treated patients (25% vs. 46%, $p = 0.02$). The relative reduction in unfavorable outcome in the nimodipine-treated group was even higher (55%, $p = 0.002$) when only patients who complied with the protocol were considered ⁴⁾.

References

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