Effect of magnesium treatment and glucose levels on delayed cerebral ischemia in patients with subarachnoid hemorrhage: A substudy of the Magnesium in Aneurysmal Subarachnoid Haemorrhage trial (MASH-II)

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 Background: Magnesium treatment did not improve outcome in patients with aneurysmal subarachnoid haemorrhage in the Magnesium in Aneurysmal Subarachnoid Haemorrhage II trial. We hypothesized that high glucose levels may have offset a potential beneficial effect to prevent delayed cerebral ischemia. We investigated if magnesium treatment led to less delayed cerebral ischemia and if glucose levels interacted with magnesium treatment in the Magnesium in Aneurysmal Subarachnoid Haemorrhage II trial. Aim: To investigate the effect of magnesium treatment on occurrence of delayed cerebral ischemia and the interaction between glucose levels and magnesium treatment in subarachnoid hemorrhage patients. Methods:

The Magnesium in Aneurysmal Subarachnoid Haemorrhage was a phase III randomized placebo-controlled trial assessing the effect of magnesium sulphate on clinical outcome in aneurysmal subarachnoid hemorrhage patients. For the current study, we included only