

Medical Update Memo

January 4, 2009

A short-term randomized MRI study of high-dose oral vs intravenous methylprednisolone in MS.

Summary

Authors report on a randomised trial, the objective of which was to compare the efficacy, tolerability and safety of intravenous methylprednisolone vs oral methylprednisolone at equivalent high doses in treating MS exacerbation. The results suggest that oral steroids are as effective as intravenous steroids in terms of MRI or clinical outcome. Also, these two treatments seem to have similar safety and tolerability profiles. *Neurology*. 2009 Dec 1;73(22):1842-8

Details

40 patients with MS, who had experienced an exacerbation in the previous two weeks and who had evidence of inflammation on MRI were selected. Half(20) were then randomized to receive 1 gram per day of oral methylprednisolone and half(20) to the same dose of methylprednisolone given intravenously (IV). Both treatment arms lasted 5 days. Participants were evaluated neurologically and with MRI at baseline, and at weeks 1 and 4.

The study primary research question (endpoint) was to compare the efficacy of the 2 treatment routes in reducing the amount of inflammation seen on MRI after 1 week from treatment initiation. Secondary outcomes included safety, tolerability, and clinical efficacy profiles of the 2 routes of administration.

The 2 groups showed a similar reduction of inflammatory activity seen on MRI at the week 1 assessment. Both groups also showed a comparable improvement of neurological function as measured by EDSS at week 4. Both treatments were well-tolerated and adverse events were minimal and occurred similarly in the 2 treatment arms.

Investigators concluded that oral methylprednisolone is as effective as IV methylprednisolone in reducing inflammatory activity seen on MRI in patients with MS, soon after an acute relapse with similar clinical, safety, and tolerability profiles. This study provides reliable evidence that 1 gram of methylprednisolone taken daily for 5 days offers similar efficacy whether taken orally or intravenously.

National Research and Programs

Offert en français.

Disclaimer

The Multiple Sclerosis Society of Canada is an independent, voluntary health agency and does not approve, endorse or recommend any specific product or therapy, but provides information to assist individuals in making their own decisions.