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1: Neurol Res. 2006 Apr;28(3):316-9.

Uric acid in multiple sclerosis.

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Peroxynitrite, a reactive oxidant formed by the reaction of nitric oxide with superoxide at sites of inflammation in multiple sclerosis (MS), is capable of damaging tissues and cells. Uric acid, a natural scavenger of peroxynitrite, reduces inflammatory demyelination in experimental allergic encephalomyelitis. Some studies reported lower serum levels of uric acid in MS patients compared with controls, whereas other studies found no difference. A critical appraisal of these studies favors the view that reduced uric acid in MS is secondary to its peroxynitrite scavenging activity during inflammatory disease activity, rather than a primary deficiency. Serum uric acid levels could be used as a biomarker for monitoring disease activity in MS. Therapeutic strategies aimed at raising serum uric acid levels may have a glial/neuroprotective effect on MS patients.

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