No Difference in CSF Serum UA in MS Patients Versus Controls

Uric acid (UA) is an endogenous antioxidant [Guerrero AL et al. *Neurol Sci* 2011], a natural scavenger of peroxynitrite [Liu B et al. *Neurol Res* 2012]. Recent studies have found that multiple sclerosis (MS) patients have lower serum UA levels than controls [Liu B et al. *Neurol Res* 2012].

Guerrero et al. demonstrated an association between lower UA levels in MS patients and clinical relapse. They also found an inverse correlation between lower serum UA levels and disability assessed by Expanded Diability Status Scale score [Guerrero AL et al. *Neurol Sci* 2011]. F. Esfandiari, Neurology Research Institute, Kerma, Iran, presented a poster from a study evaluating levels of cerebrospinal fluid (CSF) and serum UA in MS patients compared with a control group.

A total of 50 patients (30 with MS and 20 with noninflammatory neurological disease [NIND]) participated in the study. Controls were matched for age and sex. Descriptive statistics were presented as mean percentage ± SD. The *t*-test was used to assess whether the means of the two groups were statistically different from each other. The authors performed all analyses using SPSS 17 (IBM, Armonk, New York, USA).

Results showed that the mean CSF UA in MS patients was 0.19 mg/dL (SD=0.12) versus 0.24 mg/dL (SD=0.189). Mean serum UA in MS patients was 3.95 mg/dL (SD=1.24) versus 4.04 mg/dL (SD=1.36) in the control group. In both groups, the relationship between CSF and UA was not significant (p=0.30). In addition, there was no significant difference between serum UA in the MS and the control group (p=0.83).

This study found no significant difference in CSF and serum UA between patients with MS and those in the control group. Future research is needed to determine the role of UA in the pathology and/or treatment of MS.

IVMP Improves Walking Speed After Relapse

Rehabilitation is important in maintaining and improving function in individuals with multiple sclerosis (MS), but there is no consensus on what may be the most effective approach to achieving the best possible functionality within a patient's limitations [Rasova K et al. *Health Qual Life Outcomes* 2010]. Moreover, there are few data on what constitutes a clinically significant change in a timed walk test after treatment for relapse [Coleman CI et al. *Curr Med Res Opin* 2012]. K. Gross-Paju, MD, PhD, West-Tallinn Central Hospital, Tallinn, Estonia, presented outcomes from a study to examine the recovery dynamics of walking ability in MS patients during a three-month period after relapse.

A total of 25 patients with relapsing-remitting MS were recruited. Four had two relapses during the study period. A total of 29 relapses were assessed; all were treated with 5 g of IV methylprednisolone (IVMP). Assessment measures included the Extended Disability Status Scale (EDSS), 6-Minute Walk Test (6MWT), and the Multiple Sclerosis Walking Scale (MSWS). Walking parameters were recorded during relapse after the first IVMP drip, the last IVMP drip, and at 1 and 3 months after relapse.

Post-relapse EDSS scores improved at 1 and 3 months (p=0.0118 and p=0.0023, respectively). After the first IVMP drip, there was significant improvement in the 6MWT compared with relapse (6.5%; p≤0.0001). Improvement increased up to 9% (p=0.0001) after the fifth IVMP drip, but remained unchanged at further follow-up. Outcomes on the MSWS followed a similar course: 20% improvement (p≤0.0001) compared with relapse after the fifth IVMP drip, with no change during follow-up.

Data confirmed a significant improvement in the 6MWT after the first IVMP drip, which was sustained at 3-month follow-up. After the fifth IVMP drip, there was a 20% improvement in the MSWS, which was sustained up to 3 months.

A Case of Family MS and Sarcoidosis

The increased risk of a different autoimmune disorder occurring in the families of individuals who develop multiple sclerosis (MS) is well-recognized [Barcellos LF et al. *Lancet Neurol* 2006]. Such findings imply that certain genetic variants may increase susceptibility to autoimmune disease in general as opposed to influencing the development of one specific condition [International Multiple Sclerosis Genetics Consortium. *Genes Immun* 2009]. A. Kuqo, University Neurology Service, Tirana, Albania, presented a case report of two sisters diagnosed with MS, one of whom developed sarcoidosis.

A 46-year-old female was diagnosed 12 years earlier with relapsing-remitting MS according to McDonald Criteria [Polman CH et al. *Ann Neurol* 2011]. Treatment with β-interferon for a consecutive period of nine years significantly reduced relapses. Neurological conditions were stable, and the patient had a score of 3 on the Kurtzke Expanded Disability Status Scale. The patient's sister, also diagnosed with MS, was being treated by the same team. Three years prior, the original patient complained of