

[2003 Fall A2] Levetiracetam in the management of lumbar radiculopathy

Hamza M, Grubb C

University of Virginia, Charlottesville, VA, USA

Objective: The efficacy of anticonvulsants in the symptomatic management of neuropathic pain syndromes has been reported. Levetiracetam is approved as adjuvant therapy of partial onset seizures, and has shown efficacy in refractory migraine headache, and neuropathic pain. Thus, we evaluated the use of Levetiracetam patients with lumbar radiculopathy.

Methods: Levetiracetam was initiated at 500 mg BID and increased to 1000 mg BID in two weeks, then to 1500 mg in two weeks as add-on therapy in 26 patients with EMG-proven radiculopathy. Each patient had an MRI to exclude surgically correctable etiology of radiculopathy. Patients were observed for three months. Assessments included pain, mood, general activity, and sleep quality were assessed on an 11-point scale (0=no pain, most active, best mood, best sleep; 10=worst pain, mood, or sleep quality, least active). Evaluations were performed at baseline, 4, 8, and 12 weeks. Laboratory studies (CBC, LFTs, serum electrolytes) were done at base line, week 6, and week 12 or study termination.

Results: In this series, the mean pain baseline score 9.5 (range: 8-10) decreased to 5.25 (range: 5-6); mean general activity baseline score of 7.25 (range: 4-10) decreased to 4.25 (range: 3-6); mean mood baseline score 7 (range: 4-10) decreased to 4 (range: 1-5); mean sleep quality baseline score 7 (range: 5-10) decreased to 4.5 (range: 3-6). Two patients dropped out secondary to somnolence during the titration phase. One patient was able to reduce their daily dose of MSIR. Other adverse events were mild and included somnolence, blurred vision, and short-term memory dysfunction. These events, however, were transient and improved over the initial 3 weeks of treatment. There were no clinically significant changes in laboratory studies

Conclusions: These observations suggest Levetiracetam's efficacy in the treatment of lumbar radiculopathy, an entity of neuropathic pain. Controlled trials to firmly establish its efficacy are recommended

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