May 01, 2014
Poster Session VII
Neuromuscular Disease: Therapy

Effect of Agmatine Sulfate on Neuropathic Pain (P7.094)

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Abstract

ABSTRACT

OBJECTIVE: To evaluate the effect of agmatine sulfate on neuropathic pain**BACKGROUND:**Neuropathic pain is common complaint of many patients especially diabetic patients, and current treatment is often not effective. Based on previous studies suggesting oral agmatine was a safe and effective treatment for sciatica we began a prospective study of the effect of Agmatine Sulfate, a decarboxylated arginine, on neuropathic pain.**DESIGN/METHODS:**Patients diagnosed with neuropathic pain were recruited into this study after a diagnosis of a small fiber neuropathy was confirmed by skin biopsy and/or quatitative sensorimotor axonal reflex testing (QSART). The Neuropathic Pain Questionnaire (Clinical Journal of Pain 19:306-314, 2003) was before started then monthly during a two month treatment period with agmatine sulfate (3.670 g/day), the nutraceutical salt of agmatine. This questionnaire includes 8 scales with positive correlations and 4 with negative correlations to neuropathic pain (i.e., a high score on the latter scales suggests a non-neuropathic pain). Patients were allowed the use of any concomitant conventional treatment during the study. QSART was also repeated at the end of the study. Statistical analyses were performed using student T-Test.**RESULTS:**Five patients have completed the study to date. The only side effect was an unpleasant taste noted by a single patient that did not prevent finishing the study. T-test evaluation was done comparing the initial with the final answers. The Total Discriminant Function scores showed a significant decrease (p=0.03). The detailed categorization of neuropathic pain characteristics show significant decrease in burning (p=0.02), tingling (p=0.04) and unpleasant (p=0.02) aspects of the pain.**CONCLUSIONS:**Our results in this ongoing study suggest that Agmatine Sulfate has a significant effect in decreasing burning, tingling and unpleasant aspects of neuropathic pain. It also has a statistical significant decrease in total Discriminant function score after two months of administration.**Study Supported by:**Gilad&Gilad

Disclosure: Dr. Tohidi has nothing to disclose. Dr. Hassanzadeh has nothing to disclose. Dr. Sherwood has nothing to disclose. Dr. Ma has nothing to disclose. Dr. Rosenberg has nothing to disclose. Mrs. Gilad has received contractual right payments. Mrs. Gilad holds stock and/or stock options in G&V Gilad Ltd. which sponsored research in which Mrs. Gilad was involved as an investigator. Dr. Gilad holds stock and/or stock options in G&V Gilad Ltd. which sponsored research in which Dr. Gilad was involved as an investigator.

Thursday, May 1 2014, 3:00 pm-6:30 pm