Sodium valproate versus Memantine in migraine prophylaxis: a double-blind

randomized clinical trial

**Abstract**:

Background and Objective: Sodium Valproate is an anti-seizure and mood stabilizer used to

prevent migraine headaches. Despite the effectiveness and efficacy of this drug, some patients

can not tolerate the drug due to the drug complication. The aim of this study was to compare the

efficacy of memantine as a less complicated drug and sodium valproate in migraine prevention.

Methods: Patients with migraine referred to Neuroscience clinic of Kosar and Royan Clinic of

Ardabil University of Medical Sciences were evaluated. The study was performed double-blind,

so 80 patients were randomly assigned into one of the two groups (each group of 40 patients): 1.

Memantine group 2- The sodium valproate group in each group after 12 weeks of using her

medication for 4 Week did not take any medication. After that, memantine, sodium valproate,

and memantine sodium group were given for 12 weeks. During this period, the severity of the

headache, the duration of the headache, the frequency of headache, side effects and the rate of

use of analysesics during acute migraine attacks were recorded by patients in daily notes. The

relevant information was collected and evaluated.

Results: Two drugs of Sodium Valproate and Memantine were compared in all patients. The

effect of these two drugs during the 6 month period of treatment showed that there were a

significant difference in the frequency and severity of headache and MIDAS score in terms of

the effect of the two drugs.

**Conclusion**: Sodium Valproate has better effects on treating patients rather than Memantin.

Keywords: Memantine, Sodium Valproate, Migraine