

## **Abstract**

### **Investigation on Relation Between Serum Magnesium Level and Severity and Frequens of Attacks of Migraine Headache in Alavi Hospital of Ardabil 1393**

## **Introduction**

Migraine is a common condition and chronic problem and for this reason it have more efficacy on quality of life in patients. Migraine also has several effects. Some studies have mixed results regarding the association between serum magnesium levels and the severity and frequency of migraine headaches has shown. Some of them have been proven to increase magnesium in reducing the severity and frequency of headache. Hence, in this study we examined the effect of magnesium on the severity and frequency of migraine headaches.

## **Methods and Material**

This study is a clinical trial. In this study, patients were selected based on inclusion and exclusion criteria and data were extracted to Czech list. The patients were divided randomly into two groups of 50. The first group in addition to the usual migraine medication, pills were prescribed magnesium oxide and vitamin E as a placebo was administered to the control group. Changes in serum magnesium levels and the severity and frequency of migraine headaches, one and three months after the start of the study were evaluated. The results were entered into the statistical analysis.

## **Results**

In the study in control group 26% and in case group 39% was male and others was femail. All patients were aged 65-18 years. At baseline, one month and three months later, the mean serum magnesium levels in the case and control groups did not vary much difference ( $p= 0.712$  ,  $p= 0.102$  ,  $p=0.201$  ). Pain severity in patients 1 and 3 months after initiation of the study in control group was reduced but there was no significant difference between two groups. ( $p=0.146$  ,  $p=0.172$  ) Reduce the number of headaches a month later in the patient group than the control group was not significant. ( $p= 0.886$  ) . But three months later, there was significant difference between the two groups. ( $P= 0.004$ ).

## **Conclusion**

The results of this study showed that administration of magnesium can reduce the number of migraine attacks become more effective in preventing disease.

**Key words :** Migraines, magnesium, serum level