The relationship between magnesium level and first 72 hours Rankin score and Rankin score in 1 week after an ischemic stroke

Alia Saberi, Hamid Reza Hatamian, Keyvan Esmaeilzadeh, Abtin Heydarzadeh

Abstract

**Background:** We intended to investigate the serum magnesium impact upon the disability after ischemic stroke.

**Methods:** A total of 67 ischemic stroke patients who less than 6 hours had passed from their attacks participated in this cross sectional study. We have measured their serum magnesium level and determined its correlation with their Rankin Disability Score (RDS) in the first 72 hours (RDS0) and after 1 week (RDS1w) and its change in this period of time by using nominal regression method and repeated measure ANOVA in SPSS 17.

**Results:** There was a reciprocal statistical correlation between serum magnesium level and RDS0 and RDS1w. (P=0.000 & 0.002 respectively). But it hasn’t any significant statistical correlation with the changes of this score in this period of time (P=0.513).

**Conclusion:** Serum magnesium level is a good predictor for patients’ abilities that involved by an ischemic stroke.