Abstract

Background: Pathophysiology of migraine involves different mechanisms including modulation of central and peripheral pain structures and release of vasoactive peptides. Studies revealed decreased levels of micronutrients riboflavin, magnesium and coenzyme . Deficit of nutrients could play role in the pathophysiology .Treatment with nutritional supplement might benefit for patients who cannot tolerate chemical drugs .

Methods: In this cross sectional analytical observational study , Magnesium levels of 56 patient checked .Then recruited into Folic acid + magnesium (FA+MG) and Flunarizine. Headache impact test(HIT) score was evaluated pre and post treatment after 2 month. Concomitant improvement and adverse events was checked.

Results: Mean magnesium was 1.9877 ± 0.1355 with range between 1.65-2.34mg. 21.4 % had low magnesium. Mean magnesium found in lower normal range.Pre HIT was between 56-66 with mean of 66.30. In FA+MG , 27 patients had Pre HIT of 64.93 ± 5.196 and in flunarizine , 29 patients had 67.59 ± 4.524.Comparison showed significant difference (p value - 0.046).Post HIT in FA+MG was 53.81 ± 10.340 and Flunarizine was 54.55 ± 8.919. Comparison

showed no statistical difference (p value - 0.776). Comparing percentage difference with FA+MG having 17.0898 ± 14.79 and flunarizine having 18.7929 ± 15.3326 with no statistical differences (p value - 0.674).

Response to treatment and Side effects showed no statistical difference between both groups (p value - 0.685).

Conclusion: Hypomagnesemia would be one factor causing migraine and should be checked in patients with suspected migraine.Starting prophylaxis with Combination of Folic acid and magnesium would be better .