Evaluation of visual field and PERG parameters of glaucomatous patients under oral supplement of forskolin, magnesium, homotaurin, L-carnosin, vitamins B1, B2, B6 and folic acid

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**Background:** Forskolin, magnesium, homotaurin, L-carnosin, vitamins B1, B2, B6 and folic acid are the main ingredients of a food supplement commercially available. This drug contributes to a small reduction of IOP in glaucomatous patients who are poorly responsive to multitherapy treatment. The aim of this study is to evaluate a possible change of visual field and pattern-electroretinogram (PERG) parameters after oral supplement of this drug.

**Patients & Methods:** This is a single center, retrospective study. It was conducted on files of 20 (10M, 10F) treated glaucomatous patients and 20 (10M, 10F) untreated controls. All these patients were affected by open-angle glaucoma under monotherapy but this association was supplemented twice a day to 20 patients as long as 12 months. The ophthalmological data (IOP, pachymetry, visual field assessment by FDT 30-2 strategy pattern standard deviation, PERG) were checked at time 0, 3, 6, 9 and 12 months from the beginning of the oral therapy. The statistical analysis was performed by descriptive statistics, one-way ANOVA and Wilcoxon test. Results were considered significantly different when p<0.05.

**Results:** The two groups were age and sex-matched (p=0.335). The two groups were also matched as for pachymetry (p=0.187). The visual field parameter (mean deviation and pattern standard deviation by FDT 30-2 strategy) was statistically significantly different only at time 12 months (p=0.04). The PERG amplitude increases by 16.12%±2.6 at time 9 months and fovea sensitivity by 16.57%±3.2 at time 6 months (p<0.05).

**Conclusions:** Our preliminary data stress the neuroprotective effect of the association of forskolin, magnesium, homotaurin, L-carnosin, vitamins B1, B2, B6 and folic acid from a campimetric and electrophysiological point of view.

**Biography**
Italo Giuffre is working as consultant since 2009 at the Department of Ophthalmology of Catholic University (Roma – ITALY). He attended a lot of stages in Ophthalmological Department abroad (Spain, France, Belgium, Holland, Germany ...). He is author of a monograph entitled "Genetics of Eye Diseases", I.N.C. Editor 2000 and of more than 80 papers on Italian and international peer-review journals.

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