The aim of the paper is to reveal any differences of therapy response which might be related to different antioxidative activity of anti-aging vegetal supplements represented by tinctures and soft capsules that contain active vegetal principles (rutin, betacaroten, anthocyanins) with vasoprotective and antioxidative capacity (vitamin C, vitamin E and selenium) [1].

For this reason we used 3 groups of 40 persons of each one divided after gender (males and females) and age (20 – over 65 years) and different affections (20 patients with miopy, 15 patients with macular degeneration, 5 patients with peripheral retinal degeneration), from these 3 groups one was the control one. From the two experimental groups, one received daily 1 capsule, and the other one, 10 drops diluted with 50 mL water, both over one year. Clinical evaluation before and after the treatment of these vegetal supplements action was done by Amsler ophthalmologic test, visual acuity, visual field, ophthalmological examination for degenerescence maculopathy. For peripheral retinal degenerescence, clinical evaluation of the vegetal supplements action was done by visual acuity, visual field, ophthalmoscopic aspect of the retina and for myopia disease by refraction, visual acuity, visual field and ophthalmoscopic examination.

The antioxidative activity of these different vegetal used supplements was determined by a photochemiluminescence method (PCL), based on the multiple acceleration of a natural reaction leading to the generation of a superoxide anion radical. The measuring principle is based on the fact, that the antioxidants present in the sample eliminate part of the radicals in the measurement solution and thus reduce the intensity of fluorescence. The thus measured antioxidative capacity is then quantified by comparison with a standard substance used for calibration, ascorbic acid (in ACW method) or Trolox as tocopherol analog (in ACL method) using a PHOCHEM, Analytic Jena apparatus [2 – 3].

The obtained results were statistically evaluated by "t" Student test, at a p<0,05 significance level confidence [4]. The antioxidative capacity results show that after the treatment based on different vegetal active principles, some of visual parameters improved or at least remained the same compared to control group, without treatment.

References


