ABSTRACT

Dark adaptation (DA), as opposed to visual acuity, is a superior test for the presence and staging of AMD.1 A MacuLogix Adapt-Dx DA test result in excess of 6.5 minutes predicts future AMD by at least 3 years before visual decline.2 Furthermore, this clinical test, analogous to a glaucoma visual field, has a sensitivity and specificity of 90%, on par with the clinical performance of a retinal specialist.3

Short and long term improvement in visual function and structure has been supported by AMD patients treated with Longevinex®, a nutraceutical supplement containing red wine (including 100 mg of resveratrol), metal binding (notably palladium), Krill Oil, vitamin E, Centrum® Multivitamins, atorvastatin 20 mg, Bright Eyes® and logging dietary intake (Figure #1).

Table 1 tabulates demographic data including age, gender, AMD diagnosis (years), current smoking (ppd), current alcohol intake (OD per week), and fixation error rate at varying clinical intervals. Out of 14 eyes, 8 stayed the same/improved, 4 worsened, and 2 were unavailable.

Table 3 tabulates DA data regarding duration, log intercept, and baseline log sensitivity at varying clinical intervals and demonstrates overall DA improvement. Rod threshold shows improvement/stability in 8/14 eyes, worsening in 4/14 eyes and unavailable in 1/4. Baseline log sensitivity improved/stabilized in 13/14 eyes. All but 2 improved in one or more of the DA parameters across several clinical cases and for one of the MacuLogix Adapt-Dx target values.

Figure 1 shows improvement/stability in 13/14 eyes improved/stabilized and 1/4 worsened. All but 2 improved in one or more of the DA parameters across several clinical cases and for one of the MacuLogix Adapt-Dx target values.

RESULTS

Adapt-Dx DA data was available for the first 7 patients

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CONCLUSIONS

Subclinical AMD is a highly prevalent disease that in theory causes avoidance vision loss years before an eye doctor can see visual changes within the retina.4 Longevity biotechnology (LT) is the new biomarker for AMD detection for both diagnosis and staging. Prevention and not mere detection is the ultimate public health goal. Longevity biotechnology down regulation of VEGF has been shown to restore myocaidal dysfunction in hypercholesterolemic animals.5 In 16 animals, LT downregulated VEGF and showed improvements in visual function and structural integrity, whereas resveratrol at high dose does have toxicity; it is beneficial against human metabolic syndrome (Figure 2) and Functions as an antidiabetic drug with insulin like sugar level lowering effecting and 4) Promotes chondroilar vasoconstriction and thickening. Combining Macronutrients is the optimal approach such as Longevinex® supplementation may alter the natural time course of AMD. Our observations should be viewed as a continuing research effort and cost effective strategy for large populations of at risk patients.

References

Available upon request

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