Resveratrol supplements are associated with a significant improvement of contrast sensitivity in cases of wet AMD

Datseris Ioannis¹, Bouratzis Nikolaos², Kotronis Charalambos³, Datseris Iordanis¹, Tzanidaki Malvina-Efthymia¹, Rouvas Alexandros³, <u>Gouliopoulos Nikolaos¹</u>

¹ OMMA Eye Institute, Athens, Greece

² Specialized Eye Hospital "Ophthalmiatreion" Athinon, Athens, Greece

³ 2nd Department of Ophthalmology, Medical School of University of Athens, Athens, Greece



PURPOSE

To determine whether the daily intake of **resveratrol** food supplements in patients with <u>wet age-related macular</u> <u>degeneration (AMD)</u> is associated with an improvement of patients' **contrast sensitivity**.

MATERIALS and METHODS

50 naïve and previously untreated patients suffering from wet-AMD were enrolled in our prospective study. They were randomly assigned in two subgroups (of 25 patients), according to the applied treatment modality. In both groups, a Pro Re Nata treatment regimen of intravitreal injections of 2.0 mg aflibercept (IAIs) was applied; 3 monthly IAIs were followed by injections according-to-need, while in the second group the patients consumed daily two tablets of a resveratrol oral supplement. The patients' disease status was monitored every month for one year. Contrast sensitivity was assessed with the Pelli-Robson chart. The primary endpoint was the changes in the evaluated scores from the baseline values. Best corrected visual acuity (BCVA) at baseline and at 12 months, as well as the number of applied IAIs were also evaluated.

No significant changes were detected regarding the baseline demographic and clinical data (p>0.05 for all)

between the studied groups.

	Eylea (n = 25)	Eylea & Resvega® (n = 25)	P value
Age (years)	74.88 ± 7.58	74.44 ± 5.00	0.81
Male Sex (%)	28	40	0.38
LogMAR BCVA	0.66 ± 0.25	0.63 ± 0.22	0.65
Contrast Sensitivity	0.87 ± 0.45	0.86 ± 0.29	0.91

Over the 1-year study period, the <u>mean values of **contrast sensitivity** had **significantly improved** in the patients that were treated with the **resveratrol** oral supplement compared to the patients of the other group (mean change 0.17±0.19 vs. 0.35±0.24, p=0.005). It is worthy to note that the detected improvement was found even though no changes were identified regarding the BCVA values and the number of applied IAIs (p>0.05 for both) between the</u>

studied groups.

	Eylea (n = 25)	Eylea & Resvega® (n = 25)	P value
LogMAR BCVA (change)	-0.13 ± 0.16	-0.22 ± 0.19	0.09
Contrast Sensitivity (change)	0.17 ± 0.19	0.35 ± 0.24	0.005
Number of Injections	4.52± 1.00	4.28 ± 0.90	0.38

CONCLUSIONS

Our findings suggest that <u>resveratrol</u> oral supplements may have a **positive effect** in **wet AMD patients**' **contrast sensitivity**, resulting thus in a <u>better visual function</u>.

RESULTS

Efficacy of resveratrol supplement in wet-AMD

Clinical Research

One-year outcomes of resveratrol supplement with aflibercept versus aflibercept monotherapy in wet agerelated macular degeneration

Ioannis Datseris¹, Nikolaos Bouratzis², Charalambos Kotronis³, Iordanis Datseris¹, Malvina–Efthimia Tzanidaki¹, Alexandros Rouvas³, Nikolaos Gouliopoulos³

Int J Ophthalmol. 2023 Sep 18;16(9):1496-1502.