Comparison of quality of life in patients with glaucoma and age related macular degeneration

Seyda Ugurlu, Arife Esra Kocakaya

1Department of Ophthalmology, Izmir Katip Çelebi University, Izmir - Turkey
2Sifa Medikal Center, Izmir - Turkey

Purpose: To compare quality of life (QoL) in patients with primary open angle glaucoma (POAG) and dry type age- related macular degeneration (AMD) with similar visual acuity

Methods: Consecutive patients who attended to Glaucoma and Retina Clinics were recruited. Patients who had visual acuity below 20/200, nuclear sclerosis above grade 1, and other retinal and ocular pathologies were excluded. All patients had complete ophthalmic examination. Contrast sensitivities of the patients were measured by CSV-1000HGT (Vector;Vision, Greenville, Ohio). Quality of life analysis was performed with Turkish version of National Eye Institute Visual Function Questionnaire-25 (NEI VFQ-25) test.

Results: Average age of 43 POAG and 49 AMD patients were 64.88 ± 10.5 and 67.48 ± 8.1 years, respectively (p = 0.183). 86% of the POAG patients had mild glaucoma according to Hodapp classification. Average mean defect value was -4.94 ± 3.45dB. Contrast sensitivity values for spatial frequencies of 3cpd were 1.40 ± 0.11 and 1.53 ± 0.95 (p = 0.001), for 6 cpd 1.61 ± 0.11 and 1.74 ± 0.1 (p = 0.001), for 12 cpd 1.31 ± 0.11 and 1.29 ± 0.16 (p = 0.775), for 18 cpd 0.71 ± 0.12 and 0.67 ± 0.13 (p = 0.201) in POAG and AMD groups, respectively. Overall scores of NEI VFQ-25 were 86.44 ± 6.96 in POAG group, and 84.66 ± 7.56 in AMD group (p = 0.244). ‘Ocular pain’, ‘color vision’, and ‘peripheral vision’ subgroups were effected more in POAG than AMD group; ‘close activity’, ‘distant activity’ ‘social function’ and ‘dependency’ subgroups were effected more in AMD than POAG group. Strong positive correlation was noted between contrast sensitivity scores and NEI-VFQ 25 test results at all 4 spatial frequencies in both POAG (r = 0.640, p = 0.001; r = 0.640, p = 0.001; r = 0.640, p = 0.001; r = 0.642, p = 0.001) and AMD (r = 0.877, p = 0.001; r = 0.821, p = 0.001; r = 0.599, p = 0.001; r = 0.652, p = 0.001) groups.

Conclusion: The impact of POAG and AMD on QoL appears to be similar in patients with similar visual acuity when overall NEI VFQ-25 test results are taken into account. Preservation of contrast sensitivity may have profound effect on quality of life in both glaucoma and AMD patients.