

Low Vision Rehabilitation Program in Myopic Macular Degeneration: A case report

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Introduction: Patients with high myopia are at risk of developing myopic macular degeneration (MMD), that leads to vision loss and irreversible visual impairment. Elderly populations are affected by loss of quality of life. Low vision services should offer specialized training programs to help patients to overcome the difficulties in daily living activities. The aim of this study was to describe the results of a low vision rehabilitation program (LVR) in a patient with MMD.

Methods: A 69-year-old male patient with MMD was included in the LVR at an ophthalmology clinic in Portugal. The LVR had a length of 8 weeks and was divided into two phases. The first phase included the use of prisms for image relocation (IR) with eccentric viewing exercises to stabilize the preferred retinal locus. At the second phase, training with low vision aids was performed. Best corrected visual acuity (BCVA) for distance and near, contrast sensitivity (CS), reading speed (RS) and face recognition were compared pre and post rehabilitation. Additionally, the patient had open-angle glaucoma that was treated (glaucoma eye drops and neuroprotection treatment) and monitored by Spectral domain optical coherence tomography.

Results: The patient had MMD category 2 (diffuse chorioretinal atrophy) and moderate visual impairment in the best eye. The IR prism of 6 prism dioptres was adapted in the left eye, followed by magnification with an electronic device to improve reading ability. At the end of the LVR, the outcomes were better in all measures. BCVA and CS increased by one line, RS duplicated in words per minute and face recognition was improved. The ganglion cells complex showed discrete improvement and stabilization at the final follow-up.

Conclusions: The LVR was beneficial, improving visual function and functional vision outcomes. LVR programs seem to be effective in patients with pathologic myopia. Longitudinal studies are necessary to ascertain the long-term efficacy of LVR.