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ABSTRACT

Aims/Purpose: Patients with pathologic myopia are at risk of developing myopic macular degeneration (MMD) that leads to vision loss and irreversible visual impairment. Working age and elderly populations are affected by loss of productivity and 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 patients with MMD.

Methods: Five patients (8 eyes) with MMD were 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.

Results: Patients had MMD category 3 (patchy chorioretinal atrophy) and 4 (macular atrophy) in the best eye. Vision impairment varied between mild and severe. The IR prisms varied from 2 to 6 prism dioptres. Electronic devices were the most prescribed low vision aids. At the end of the LVR, the outcomes were good in all patients. BCVA increased by two to three lines, CS increased by two to four lines, RS increased by 40 to 60 words per minute and face recognition improved in all patients.

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

References

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