( ) R1 ( ) R2 ( ) R3 (X) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( )
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Service (sector) Retina and Vitreous Nº CEP

FUNCTIONAL RETINAL TOPOGRAPHY IN PREDOMINANTLY CLASSIC SUBFOVEAL NEOVASCULAR MEMBRANE IN AGE-RELATED MACULAR DEGENERATION AFTER PHOTODYNAMIC THERAPY (PDT)

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Purpose. PDT has been used as an alternative therapy for age-related macular degeneration (ARMD) in the last 5 years, with controversial results. The major outcome measurement for PDT efficacy used in previous studies was the visual acuity. Recently, the multifocal ERG (mfERG) has been clinically used for the assessment of central retinal topography. This study was designed to map functional retinal topography by mfERG, in a selected group of patients with ARMD, previously treated by PDT. Methods. Six patients with ARMD aging from 71 to 81 years and best corrected visual acuity (BCVA) ranging from 20/40 to 20/200 had mfERG testing in their clinically affected eyes after 2 years of PDT. The mfERG was performed using the VERIS System, with a stimulus array of 103 scaled hexagons within the central 25o. Amplitudes and implicit times were compared with control subjects. Visual fields (SITA 24-2 program) and fluorescein angiography were performed in the same visit to compare with mfERG parameters. Results. All six eyes with ARMD confirmed by characteristic patterns of leakage on fluorescein angiography, after 2 years of PDT showed reduced amplitudes and/or delayed implicit times in the mfERG that were limited to central and pericentral regions. These results were consistent with visual field loss. The clinically uninvolved eye mfERG amplitudes and implicit times were comparable to control eyes. No correlation was found between VA and foveal amplitude. Conclusion. Local electroretinographic abnormalities, consistent with fundus changes were found in the clinically affected eyes. These findings have shown abnormal retinal function topography, as measured by mfERG, in patients with ARMD who were previously treated by PDT.

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