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

Intravitreal Triamcinolone Versus Photothermal Therapy for Treatment of Choroidal Neovascularization Associated With Retinal Pigment Epithelial Detachment Costa RA, MD; Abrantes M, MD; Farah ME, MD; Cardillo JA, MD; Yasaki ES, MD; Bonomo PP, MD.

Purpose: To compare the use of intravitreal triamcinolone acetonide (TA) and low irradiance 810-nm light associated with intravenous injection of small-volume, high-concentration indocyanine green (ICG) bolus, termed Photothermal Therapy (PTT), for treatment of choroidal neovascularization associated with retinal pigment epithelial detachment (PED) in age-related macular degeneration (AMD).

Methods: A consecutive series of eyes initially treated with PTT (n = 3) were compared with a selected group of eyes treated with intravitreal injection of 4 mg of TA (n = 2) with similar lesion features. In each eye, ophthalmic examination, fluorescein and indocyanine green angiography as well as optical coherence tomography were performed. A minimum follow-up of 4 months was obtained.

Results: By 2 weeks after treatment, the PED had flattened completely (n = 3) or partially (n = 2) in all eyes. For the eyes in which the intravitreal TA was used, hyperfluorescent areas within the PED previously identified as "hot spots" on ICG angiography were still detected after 1 month of treatment despite PED resolution. On the contrary, these hyperfluorescent areas in the eyes treated with PTT gradually became hypofluorescent or similar to the background level of choroidal fluorescence at 1 month follow-up visit. At 4 months post treatment, four eyes had improved by 2 or more ETDRS lines of visual acuity and one eye (PTT) remained unchanged from the initial visual acuity. No complications related to treatments were found.

Conclusions: Both PTT and intravitreal injection of TA achieved short-term visual acuity stabilization or improvement in all eyes of AMD patients with CNV and PED. These findings were consisted with gradual retinal architecture restoration observed in optical coherence tomograms during the follow-up period.