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THE IMAGING WORLD

RETINAL HEMANGIOBLASTOMA: DIFFERENT PRESENTATIONS, DIFFERENT LINES OF MANAGEMENT

Oral Presentation

Othman I.S.*

Director of Eye and Laser World Hospital ~ Giza ~ Egypt

Persistent avascular retina (PAR) is a recognized finding in eyes with regressed retinopathy of prematurity (ROP) following spontaneous regression or treatment. However, the extent and angiographic characteristics across different clinical outcomes remain incompletely characterized.

This retrospective comparative study included 26 patients (39 eyes) with regressed ROP and high-quality WFA. Clinical data were retrieved from medical records. Peripheral retinal vascularization was quantified using the ratio of the length of temporal retinal vascularization to the disc–fovea distance (LTRV/DFD). Wide-field fundus images and WFA were assessed for peripheral retinal and vascular abnormalities, and findings were compared among spontaneous regression, anti-VEGF, laser, and surgically treated groups.

Twenty-six patients (39 eyes) were included, with a mean gestational age of 30.3 weeks and a mean birth weight of 1,344 g. The most common fundus findings were white without pressure (86%), chorioretinal degeneration (72%), vessel tortuosity (65%), and vitreous condensation/ridge-like interface (50%). Less frequent findings included straightening of the temporal arcades (23%), disc dragging (13%), and vascular telangiectasia with exudation (5%). On WFA, branching vascular abnormalities (97%), capillary dropout (92%), and arteriovenous shunts (86%) predominated, while vascular leakage was observed in 60% of eyes and absence of the foveal avascular zone in 13%. The mean LTRV/DFD ratio was highest in spontaneously regressed eyes (4.3) and lowest in laser-treated eyes (3.5).

PAR is frequently associated with peripheral retinal and angiographic abnormalities. Laser-treated eyes showed the lowest LTRV/DFD ratio, indicating relatively reduced peripheral retinal vascularization. These findings support long-term surveillance with wide-field imaging and fluorescein angiography in eyes with regressed ROP.