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SURGICAL TREATMENT FOR AN ACTIVE VASOPROLIFERATIVE TUMOR WITH CONCOMITANT CHRONIC RHEGMATOGENOUS RETINAL DETACHMENT

Rosales Padron J.F.*

Instituto de Oftalmología Fundacion Conde de Valenciana ~ Mexico City ~ Mexico

Vasoproliferative retinal tumors (VPRTs) are benign, usually unilateral, abnormal vascular lesions, mainly occurring in patients around 40 years of age. These tumors may be primary or secondary to underlying systemic or ocular conditions such as Coats disease, uveitis, neurofibromatosis type 1. Clinical manifestations include pink globular vascular retinal mass in the periphery, local or diffuse exudation, serous or tractional retinal detachment, and neovascular glaucoma in advanced stages, different treatment strategies are used, including laser photocoagulation, cryotherapy, IV injection, vitrectomy. Active tumors with rhegmatogenous retinal detachment are not common, which can be a challenge as proliferative vitreoretinopathy (PVR) may develop.

17 year old female with vision loss in the last 3 years being more evident in the last 6 months, she referred no medical history, best corrected visual acuity (BCVA) in right eye 20/20 and left eye counting fingers at 2 feet , normal intraocular pressure in both eyes, clear lens in both eyes.

Right eye with normal characteristics, left eye with diffuse vitreous opacities and a chronic rhegmatogenous retinal detachment mainly in the inferior and temporal quadrants involving the macula, diffuse lipidic exudates and retinal pigmentary changes were found along the detachment, in the periphery three pink and globular masses were found in the retina with vascular abnormalities and proliferation.

Surgery was performed, a sponge for scleral buckling was placed at the equator before pars plana vitrectomy, posterior vitreous detachment and PVR membranes removal were achieved with the use of triamcinolone acetate. Subretinal fluid extraction was done after PFCL injection. Once the retina was flatter, we proceed to apply cryotherapy on the tumors. Then a fluid-air exchange was done and laser photocoagulation was applied under silicon oil endotamponade.

The retina remained attached after surgery, with persistent exudation around the tumors two weeks after the surgery, no more exudation or subretinal fluid was present after 1 month. Three months after the surgery, no evidence of tumor activity was found by fundus fluorescein angiography, the retina remained stable and the eye showed improvement in vision to 20/800 remaining stable after 1 year of follow-up.

VPRTs are a rare entity that can be found in young and productive patients, it is important to make a prompt diagnosis and treatment to stop the tumor activity as they can led to complete vision loss in late stages.

Shields CL, Kaliki S, Al-Dahmash S, Rojanaporn D, Shukla SY, Reilly B, Shields JA. Retinal vasoproliferative tumors: comparative clinical features of primary vs secondary tumors in 334 cases. JAMA Ophthalmol. 2013 Mar;131(3):328-34.

Kiri H, Raval V, Ali H, Das AV, Kaliki S. Vasoproliferative retinal tumors: Clinical presentation and treatment outcome. *Eur J Ophthalmol*. 2023 Jul;33(4):1596-1603.

Walinjkar JA, Sharma US, Rishi P, Rishi E, Gopal L, Sharma T. Clinical features and treatment outcomes of vasoproliferative tumors in Indian participants. *Indian J Ophthalmol*. 2018 Feb;66(2):246-251

Subramanian B, Nangia P, Rishi P, Walinjkar JA, Ratra D, Vadivelu JP, Majumder PD, Biswas J, Raman R. Clinical Profiles of Retinal Vasoproliferative Tumors. *J Vitreoretin Dis*. 2024 Nov 14:24741264241296464.