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Update on the Management of Diffuse Choroidal Hemangiomas

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Purpose:

Choroidal hemangioma is an uncommon and benign vascular hamartoma, that may be associated with diffuse choroidal thickening and possible overlying non-rhegmatogenous retinal detachment (non-RRD). The lesions are classified into circumscribed or diffuse forms, with the diffuse form oftentimes associated with Sturge-Weber syndrome. The main concern of the diffuse form is a secondary non-RRD. We present an update on the management of patients with diffuse choroidal hemangioma.

Methods:

We performed a retrospective study of a consecutive case series of 15 eyes (11 patients) with diffuse choroidal hemangioma who had been referred to the retina clinic between (08-2018 to 01-2020). The demographics, management, and visual/anatomic outcomes are reported. The cases were managed by serial follow-up, photodynamic therapy (PDT), and/or external beam radiotherapy (EBRT). Follow-up visits for each case were performed using ophthalmoscopy, SD-OCT, and echography.

Results:

The mean age at presentation was 19.3 years (+/- 7.4 years), involving 4 females and 7 males. In 8 patients, who had been diagnosed with Sturge-Weber syndrome, secondary glaucoma was also present. Seven patients had a unilateral hemangioma, while four patients had bilateral lesions. Five eyes of 4 patients did not show any evidence of non-RRD, or cystoid macular edema (CME). Therefore, our management consisted of close monitoring. Ten eyes of the other seven patients were more complicated with non-RRD in whom PDT was performed (6 eyes), EBRT (2 eyes), and/or EBRT followed by PDT (2 eyes). Treatment led to shrinkage of the hemangioma in all cases, along with resolution of the non-RRD. Vision was extremely variable, ranging from pre-treatment levels of 20/70 to HM. Significant anatomic improvement was commonly seen following treatment, with peak recovery being achieved as rapidly as within a month or two. Final vision ranged between CF and 20/30, with follow-up of at least six months in all patients (6-18 months).

Conclusions:

Close clinical monitoring of patients with diffuse choroidal hemangiomas is essential in all cases. In those patients with evidence of associated non-RRD, and/or CME, it is even more critical as treatment with PDT and/or EBRT may be required in order to stabilize the anatomic abnormalities, and improve visual function.