Glaucoma

SURGICAL TREATMENT OF GLAUCOMA SECONDARY TO CAROTID-CAVERNOUS FISTULA

Catarina Xavier, Bruna Cunha, Catarina Mota, Ana Filipa Duarte, Joana Cardigos

Ophthalmology, Centro Hospitalar Universitário de Lisboa Central, Portugal

Purpose: Carotid-cavernous fistulas (CCF) are abnormal vascular shunts, allowing blood to flow from the carotid artery circulation into the cavernous sinus. We present a case of refractory ocular hypertension secondary to a CCF.

Methods: case report

Results: A 48 years-old female came to our hospital due to left eye (LE) hyperemia with 1-week evolution. On ophthalmologic examination, we noticed a slight exophthalmia of the LE, dilated episcleral vessels, and an IOP of 33 mmHg (12 mmHg on the right eye). The CT scanning showed a discrete left proptosis with mild thickening of the extrinsic muscles and optic nerve, and an increase in the caliber of the superior ophthalmic vein. The angio-CT was suggestive of CCF and cerebral angiography confirmed an indirect type D CCF. Three attempts were made to close the CCF during the first 5 months, without success. Since reintervention was contraindicated and medical control of IOP was ineffective, filtering surgery was decided. Due to the presence of marked tissue congestion, we chose to implant an Ahmed valve drainage device, with a good early postoperative outcome, only registering transitory hyphema beginning in the first postoperative day, that had spontaneous resolution.

Conclusions: Diagnosis of CCF can be difficult and often delayed. The definitive treatment is CCF closure, so there are few reported cases of glaucoma surgery applied in these patients. In this case, the Ahmed valve’s implantation was effective and safe, proving to be an excellent option in cases of increased episcleral venous pressure.

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