



**Patients with neovascular glaucoma secondary to ocular ischaemia syndrome need pan-retinal photocoagulation and urgent referral to a physician**

***The Science behind the Tip***

The cause of neovascular glaucoma in two thirds of patients is either proliferative diabetic retinopathy or an ischaemic retinal vein occlusion<sup>1</sup>. Less commonly neovascular glaucoma may occur secondary to 'ocular ischaemia syndrome', which is a consequence of reduced circulation in the carotid artery or less often, in the ophthalmic artery on the side of the affected eye<sup>2</sup>.

Patients are asymptomatic initially and become aware of a gradual blurring of vision. There is a mild inflammatory response in the anterior chamber, with iris neovascularisation. Paradoxically, a normal eye pressure may be found, even in the presence of extensive peripheral anterior synechiae. The diagnosis can be confirmed with fluorescein angiography and carotid artery ultrasound.

Treatment is difficult and the visual prognosis is poor<sup>3</sup>. These patients need pan-retinal photocoagulation and urgent referral initially to a physician and then to a vascular surgeon<sup>4</sup>.

***References***

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- 3) Sivalingam A, Brown GC, Magargal LE et al. The ocular ischaemic syndrome. Mortality and systemic morbidity. *Ophthalmology* 1989; 13: 187-191
- 4) Malhotra R, Gregory-Evans K Management of ocular ischaemic syndrome. *Br J Ophthalmol* 2000; 84: 1428-1431