In neovascular glaucoma, the immediate injection of intravitreal bevacizumab (Avastin®) usually results in rapid regression of iris new vessels and pain relief

The Science behind the Tip

Neovascular glaucoma is a devastating consequence of diseases like proliferative diabetic retinopathy and ischaemic central retinal vein occlusion. New vessel formation on the iris results from the release of vascular endothelial growth factor (VEGF) by ischaemic retina1.

In patients who present with neovascular glaucoma, the immediate injection of 1.25 mg of bevacizumab into the vitreous before pan-retinal photocoagulation (PRP), results in a significant regression of iris new vessels within two days2. In the early stages of the disease, many patients have concomitant decrease in intraocular pressure (IOP) lasting several months3. In patients with refractory neovascular glaucoma who are unsuitable for PRP, pain is reduced within one week of the injection, but there is no effect on IOP4.

References


Contributor: John Salmon, Oxford