



**Patients with advanced glaucoma who are to undergo trabeculectomy should be warned that there is a small risk of permanent visual loss as a consequence of the surgery**

### ***The Science behind the Tip***

Transient visual disturbance after trabeculectomy is common and it can take several months for the vision to recover<sup>1</sup>. The risk of permanent visual loss with modern techniques is a rare consequence of the surgery<sup>2</sup>.

In patients with advanced visual field loss, especially if there is a “split” fixation (loss of visual field within the central 5°), the surgery can be followed by permanent loss of vision as a consequence of unexplained “wipe out” in 1-2% and by severe hypotony maculopathy in a further 1.5%<sup>1,3</sup>. Risk factors include high preoperative IOP and severe hypotony on the first post operative day<sup>3,4</sup>. It is more likely to occur when the surgery is complicated<sup>4</sup>.

Because of the medico-legal implications, patients with advanced glaucoma should be warned of the risk before they undergo trabeculectomy. This should be documented on the consent form.

### ***References***

1. Francis BA, Hong B, Winarko J et al. Visual loss and recovery after trabeculectomy: risk and associated risk factors. *Arch Ophthalmol* 2011; 129:1011-7.
2. Balekudaru S, George R, Panday M et al. Prospective evaluation of early visual loss following glaucoma-filtration surgery in eyes with split fixation. *J Glaucoma* 2014; 23: 211-8
3. Costa VP, Smith M, Spaeth GL. Loss of visual acuity after trabeculectomy. *Ophthalmology* 1993; 100: 599-612.
4. Law SK, Nguyen AM, Coleman AL et al. Severe loss of central vision in patients with advanced glaucoma undergoing trabeculectomy. *Arch Ophthalmol* 2007; 125: 1044-50.