



When choosing a glaucoma operation, be guided by the target intra-ocular pressure (IOP)

The Science behind the Tip

In recent years, we have seen a vast expansion of incisional surgical techniques for glaucoma with a wide range of long-term efficacy and safety profiles. The EGS guidelines recommend surgery as soon as medical or laser treatment is deemed unlikely to maintain sight in the glaucomatous eye.

To help us select the best operation for a patient, we need to decide which operation is most likely to achieve the target IOP for that patient. This is the IOP that will slow the rate of visual field deterioration sufficient to maintain the patient's quality of life¹. The more advanced the glaucoma, the longer the life expectancy, the lower the untreated IOP and the faster the progression; the lower the target IOP should be². In these scenarios, target IOP should be as low as 10-12mmHg³. In experienced hands and in the absence of risk factors for scarring (e.g., previous surgery or ischaemia), trabeculectomy with mitomycin C remains the most likely procedure to achieve these low target pressures⁴.

References

- 1) Sihota R, Angmo D, Ramaswamy D, Dada T. Simplifying "target" intraocular pressure for different stages of primary open-angle glaucoma and primary angle-closure glaucoma. *Indian J Ophthalmol.* 2018;66(4):495-505. doi:10.4103/ijo.IJO_1130_17
- 2) EGS Guidelines, 5th Edition. Fig II.3.2
- 3) Palmberg P. Evidence-based target pressures: How to choose and achieve them *Int Ophthalmol Clin.* 2004;44:1-4
- 4) King AJ, Hudson J, Fernie G, et al. Primary trabeculectomy for advanced glaucoma: pragmatic multicentre randomised controlled trial (TAGS) [published correction appears in *BMJ.* 2021 May 25;373:n1337] [published correction appears in *BMJ.* 2021 Jun 16;373:n1510]. *BMJ.* 2021;373:n1014. Published 2021 May 12. doi:10.1136/bmj.n1014

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