



Visual function may improve after trabeculectomy in some adults with moderately advanced glaucoma

The Science behind the Tip

We were taught that visual field loss from glaucoma is irreversible and that our interventions could at best, preserve the remaining vision.

However, recent studies have revealed that visual field improvement may occur in the short-term after trabeculectomy^{1,2}. In addition, a study investigating visual field changes by pointwise linear regression analysis in patients who had undergone trabeculectomy, has shown that 30% of the points in the visual field that were tested had improved five years after surgical intervention³. These results need to be interpreted with caution, as the patients studied had moderately advanced glaucoma (average MD - 7.2dB.)

This finding is supported by previous studies of optic disc morphology after trabeculectomy that have shown reversibility of structural parameters. This is well recognised in children with congenital glaucoma, but also has been shown in adults (average MD - 9.49 dB)⁴.

References

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- 3) Caprioli J, de Leon JM, Azarbod P et al Trabeculectomy can improve long-term visual function in glaucoma. *Ophthalmology* 2016; 123: 117-28.
- 4) Kotecha A, Siriwardena D, Fitzke FW et al Optic disc changes following trabeculectomy : longitudinal and localisation of change. *Br J Ophthalmol* 2001; 85: 956-61.