

Quality of life of trabeculectomy patients has an early post op dip with full recovery

Ricardo De Sousa Peixoto, Francesco Stringa, Joanna Liput, Anthony J King

Department of Ophthalmology and Visual Sciences, Queen's Medical Centre, Nottingham University Hospitals

Introduction

Glaucoma is a leading cause of blindness worldwide. Previous studies have shown that glaucoma patients have lower quality of life (QoL) but studies regarding the effect of trabeculectomy on QoL have been scarce. Trabeculectomy is an invasive procedure that requires intensive early post op after care, which may affect many aspects of patient's life.

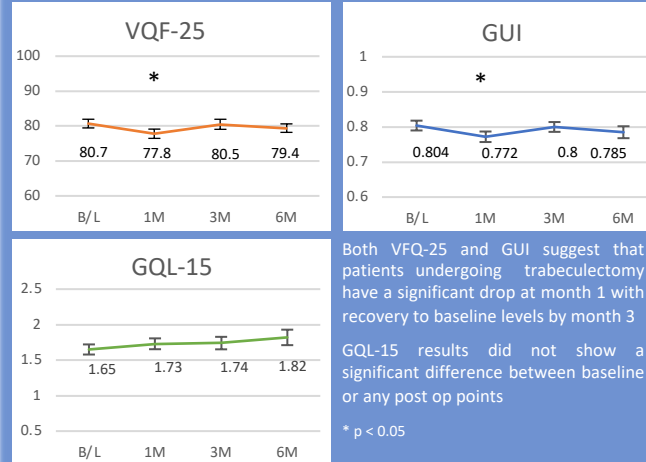
The aims of this study were:

- to study the impact of trabeculectomy in the post op period using three generic QoL tools (EQ-5D, SF-6D and HUI 3)
- to find which generic questionnaire was most sensitive in this measurement by comparing them with the visual specific VFQ-25 and the glaucoma specific Glaucoma utility index (GUI) and Glaucoma quality of life (GQL-15) questionnaires.
- To find if patient's view on their disease affected HRQoL

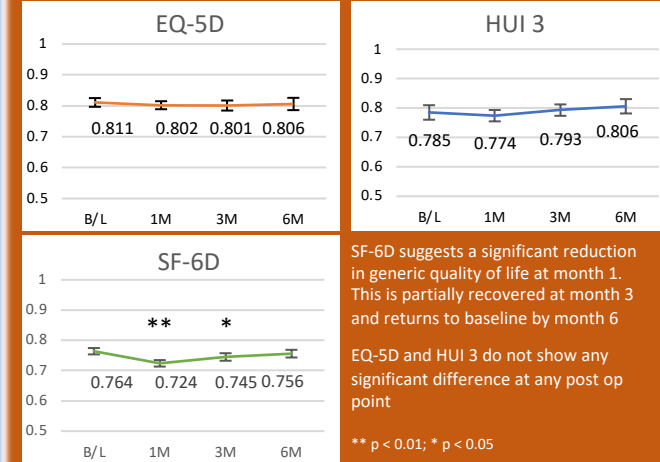
Methods

A prospective study was based in the Ophthalmology department of the Queen's Medical Centre, Nottingham University Hospitals. 156 patients who were undergoing trabeculectomy were asked if they would like to participate by filling in a booklet that included three different generic questionnaires, EQ-5D, SF-36, and the Health Utilities Index 3 (HUI 3). Patients filled in an initial baseline questionnaire at their trabeculectomy pre assessment visit and subsequently at 1, 3, and 6 months post procedure. The SF-36 results were converted into SF-6D using a licensed calculator.

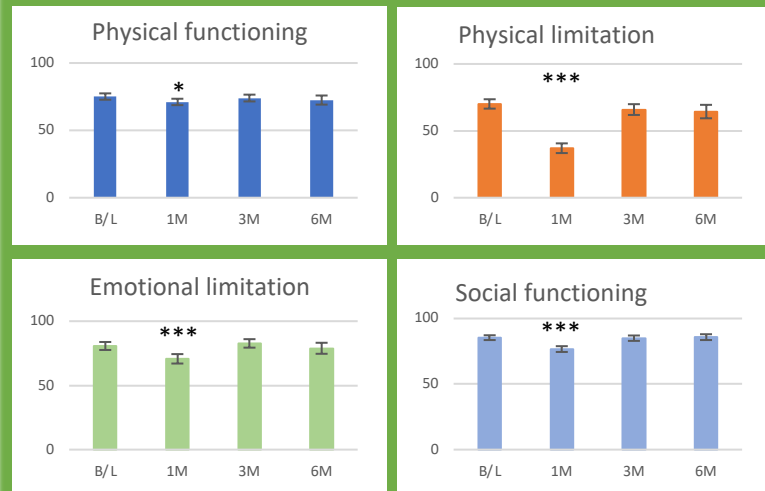
1 – Visual QoL is affected early post op and recovers by month 3



2 – SF-6D is the most sensitive generic QoL tool and mirrors visual QoL measurements



3 - Trabeculectomy impacts certain QoL domains at month 1 but this is restored at month 3



These four SF-36 domains show a reduction of various parameters of QoL, which mirror those in visual QoL and generic SF-6D. The other 4 domains measured by the SF-36, including pain, vitality, mental health and general health did not have a significant change.

* p < 0.05; *** p < 0.001

Results overview

- Visual and glaucoma-related QoL have a **significant dip in month 1** post op with **recovery by month 3**
- Generic QoL is **affected at month 1**, with partial recovery by month 3 and **total recovery by month 6**
- **SF-6D** was the only generic QoL picking up differences in QoL and identified the temporary drop in QoL observed in visual QoL tools
- The SF-36 questionnaire is also able to find some **significant differences in specific sub-domains** of QoL, including physical, social and emotional components.

Conclusions

- Trabeculectomy **improves glaucoma outcomes without decreasing QoL** in the long term but there is an **early loss of QoL** in the first few months.
- **SF-6D is the most sensitive** generic QoL tool to detect changes following trabeculectomy. It generates utility values that can calculate QALYs.
- EQ-5D and HUI-3 have poor sensitivity to measure QoL changes following trabeculectomy.
- SF-36 gives **important QoL information outside generic** scores, helping to pinpoint aspects of the patient post op experience. It can also be used to generate SF-6D utility values.
- SF-36 (with SF-6D conversion) may be helpful when undertaking **future comparisons against minimally invasive glaucoma surgery**, which results in less visual and general post op patient disruption.

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