What changes do patients report after strabismus surgery for planned psychosocial benefit?



Gemma Arblaster, Helen Davis, David Buckley, Sarah Barnes.

Faculty of Medicine, Dentistry and Health, University of Sheffield, UK.

238 A0647

BACKGROUND

Strabismus surgery in patients without diplopia and without demonstrable potential binocular single vision is typically undertaken for planned psychosocial benefit. However, this type of strabismus surgery has been reported to lead to changes in vision or improvements in performing tasks and daily activities in some cases^{1, 2, 3}.

AIM

This study aimed to explore patient experiences of changes in daily activities, tasks and vision following strabismus surgery for psychosocial benefit.

METHODS

A **qualitative study** using semi-structured interviews was conducted with 13 adults who had undergone strabismus surgery for planned psychosocial benefit 4.5-20 months earlier. Maximum variation sampling was used to recruit patients, the dimensions were sex (male (n=6) / female (n=7)) and age group (younger 18-35 (n=6) / older 36+ (n=7)).

Patients were asked what they felt had changed (improved or worsened) or not changed for them following strabismus surgery. Interviews were recorded, transcribed verbatim and analysed using nVivo software and a coding framework.

Task performance

Vision

Confidence & emotions

Themes identified from postoperative patient interviews

Fig. 1. Themes arising from qualitative interviews with patients who had previously undergone strabismus surgery for psychosocial reasons

Improvements in vision

Peripheral vision Using the eyes together

Eye movements

Using the strabismic eye more

Needing less head movement

Less confused Needing less head movement

Closing one eye less Perceived control of strabismus

Vision in busy environments Vision in strabismic eye

Improvements in task performance

Driving Using screen devices

Work ability Reading

Near activities and tasks Depth perception

Balance

Improvements in physical symptoms

Pain and discomfort Eye strain and tightness

Tiredness Need to take rest breaks

Headache

Improvements in confidence

In abilities In vision

Self-confidence Interactions with others

Fig. 2. Postoperative improvements described by patients following strabismus surgery for psychosocial reasons

RESULTS

All patients (n=13) had strabismus surgery for psychosocial benefit. No patients had diplopia or demonstrable binocular vision pre or post-operatively.

Improved vision and/or task performance was reported following strabismus surgery (n=10). No improvement in vision or task performance was also reported (n=2). One patient reported a combination of improved vision and worsening of physical symptoms following surgery.

Four themes emerged from the analysis of the patient interviews, improvements in: vision, task performance, physical symptoms and confidence (Fig. 1). The improvements perceived by patients are shown in Fig. 2.

CONCLUSIONS

Despite strabismus surgery being undertaken to improve psychosocial symptoms, many adult patients felt their vision, task performance or physical symptoms improved following surgery. These are in addition to the improvements in confidence and self-perception typically expected in this group of patients.

Whilst not reported by every patient, greater improvements are perceived by patients post-operatively than are currently measured clinically.

Quantitative studies are now underway to explore these patient perceived postoperative changes and inform outcome measures for future studies.

REFERENCES

- 1. Kushner, BJ. (1994) Binocular field expansion in adults after surgery for esotropia. *Arch Ophthalmol.* 112(5), 639-643.
- 2. Nelson, BA et al. (2008) The psychosocial aspects of strabismus in teenagers and adults and the impact of surgical correction. *J AAPOS* 12(1), 72-76.
- 3. Wortham, EV & Greenwald, MJ. (1989) Expanded Binocular Peripheral Visual Fields Following Surgery for Esotropia. *J Pediatr Ophthalmol Strabismus* 26(3), 109-112.

Gemma Arblaster is funded by a National Institute for Health Research (NIHR) Clinical Doctoral Research Fellowship for this project. This poster presents independent research funded by the NIHR. The views expressed are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

Disclosures: none (all authors)
Email: g.arblaster@sheffield.ac.uk
Twitter: @g_arblaster

