Infantile esotropia in Malaysian children: The impact of surgery on health-related quality of life assessment in patients and their parents

ABSTRACT

Introduction: Limited information is available on healthrelated quality of life (HRQoL) in children with strabismus in South East Asia. We aimed to evaluate the HRQoL and associated factors pre- and post-strabismus surgery in Malaysian children with infantile esotropia and their parents/guardians.

Methods: A prospective study was conducted on children with infantile esotropia aged 8-17 years old and their parents/guardians who attended two tertiary hospitals with a paediatric ophthalmology service from 2017 to 2018. The patients and parents answered the Intermittent Exotropia Questionnaire (IXTQ), translated into Malay, at the time of enrolment and three months after the surgery.

Results: Thirty-four children and one (each) of their parents/guardians were enrolled. Thirteen (38.2%) children had esotropia with angles of deviation of more than 50 prism dioptres. A total of 33 (97.1%) children achieved successful alignment correction three months after surgery. Surgery significantly improved the total mean scores of the children, which were 62.87 (17.05) preoperatively and 87.13 (13.26) postoperatively (p<0.001). There was statistically improvement in the total mean scores in the parent/guardian group, which was 37.07 (22.01) preoperatively and 75.39 (22.09) postoperatively (p<0.001). The parents/guardians functional, psychosocial and surgery subscales also had a significant increment in the score postoperatively (p<0.001). Older children and children with poorer visual acuity on presentation had a lower score preoperatively, while girls scored better postoperatively (p<0.05). Mothers scored significantly lower preoperatively and postoperatively (p<0.05).

Conclusion: Surgery significantly improved the HRQoL score in Malaysian children with infantile esotropia and their parents/guardians. The score was significantly higher in female children after the surgery. Mothers exhibited poor scores before and after surgery.