Outcomes of surgical management of intermittent exotropia in a paediatric age group - a retrospective study in a multi-ethnic metropolitan population

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Abstract

Statement of the Problem: Intermittent exotropia is one of the most common types of strabismus in children especially in Asian and South Asian populations. The prevalence of exotropia in this group has been estimated to range from 7-18.5X higher than esotropia. Spontaneous resolution is rare and if neglected may lead to loss of BSV and negative psychosocial consequences. We aim to assess and evaluate the outcomes of surgical management for intermittent exotropia at a unit in Birmingham (UK), a metropolitan area unique for its high non-White ethnic population (43%), the majority of who are Asian/South-Asian.

Methodology. Retrospective case notes review of all patients diagnosed with intermittent exotropia who underwent strabismus surgery in 2019-2020 by two paediatric ophthalmology consultants using two different surgical approaches with a 3 month follow up. Measures included preoperative and postoperative visual acuity and stereopsis, surgical indications, near and distance strabismus angle with refractive correction, type of surgery performed and parental satisfaction at follow up.

Results. 19 children underwent surgery during this period with a mean age of 7 range (4 to12). 18 patients had surgery for functional reasons and one for cosmetic. 2 patients recovered BSV where previously Frisby negative, remaining patients maintained BSV. The mean preoperative near and distance exodeviations was 30.16 PD and 34.47 PD respectively. The mean postoperative near and distance exodeviations 1.53PD & 5.16 PD respectively at 3 months. 2 patients developed suture granulomas which resolved with steroid drops post-operatively. No significant difference between the two surgical techniques was noted. In all cases, parents were satisfied with the results.

Conclusion & Significance: Outcomes in our multi-ethnic population have been excellent in terms of improvement in exodeviations and maintenance of BSV. Long-term follow up is required to see how many patients will show evidence of recurrence requiring reoperation and whether ethnicity impacts this.

Biography: Muhammed Omar Qadir is currently undergoing his training in Ophthalmology in the West Midlands region in the United Kingdom. He is a keen surgeon who has a particular interest in surgical outcomes with recent conference submissions related to surgical outcomes and complication rates. He is also interested in the evolving challenges of surgical training in the UK and has recently published a review article regarding this in Eye. Teaching and training remain a passion of his and he is particularly interested in the role of simulation to improve training.