

Outcomes Following Overcorrecting Minus Lens Therapy for Intermittent Distance Exotropia

Authors : Alasdair Warwick, Luna Dhir

Abstract : Aim: To ascertain the efficacy of overcorrecting minus lens therapy in intermittent distance exotropia. Methods: Retrospective audit of all intermittent distance exotropia patients seen in the Chelsea and Westminster Hospital pediatric eye clinic between 1st January 2014 and 1st March 2016. Change in LogMAR visual acuity, stereopsis, near and distance angles of deviation, as well as the proportions of patients converting to exophoria or undergoing strabismus surgery, were recorded. Results: 22 patients were identified, 45% male, mean age 5 years (range 0.6 to 18.5 years). The median overminus prescription was -1.0 dioptres (range -0.5 to -1.75 dioptres) and mean follow-up was 15 months (range 3 to 54 months). Visual acuity, near and distance angles of deviation improved but were not statistically significant: -0.15 LogMAR, -0.2 prism dioptres and -1.2 prism dioptres respectively ($p>0.05$). However, a significant change in stereopsis was observed: -74" ($p<0.01$). 27% underwent strabismus surgery and 36% converted to exophoria whilst wearing their overminus prescription. Conclusions: Overcorrecting minus lens therapy is an effective therapy for intermittent distance exotropia. There was no deterioration in visual acuity and a significant improvement in stereopsis was seen in our cohort, with many patients converting to an exophoria. The proportion of patients requiring strabismus surgery was comparable to other studies. Further, follow-up is needed to ascertain long-term outcomes.

Keywords : exotropia, overcorrecting minus lens, refraction, strabismus

Conference Title : ICSO 2017 : International Conference on Strabismus and Ophthalmology

Conference Location : Paris, France

Conference Dates : April 18-19, 2017