

## OCULAR ALIGNMENT AFTER BILATERAL RECTUS MUSCLE RECESSION FOR INTERMITTENT EXOTROPIA

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### ABSTRACT

**Background:** Intermittent exotropia (IXT) is a common type of strabismus where there is an intermittent outward deviation of the eyes. Aim of this study is to assess post-surgical ocular alignment and to evaluate changes in the deviation angle over a 12- months period in patients who underwent surgical intervention for IXT.

**Methodology:** Retrospective cohort study of patients who underwent bilateral lateral rectus recession performed by a single surgeon in 2018. Demographic details, pre- and post-surgical exotropic angle measurements were recorded. Patients were assigned based on their motor success. A post-surgical ocular deviation angle of orthophoria, exo-deviation or eso-deviation of less than 10 prism diopters (PD) was classified as success while the remaining subjects were assigned to the failure group.

**Results:** A total of 41 subjects, aged between 2 to 67 years old (mean age of 14.4 years, SD 15.65) were recruited. There were 46.3% females and 53.7% males. Majority subjects were Malay (73.2%), Chinese (26.8%). Motor success was achieved in 29 (75.6%), recurrence in 22.0% and overcorrection in 2.4% subjects. There was a good correlation between ocular alignment at 6- and 12-months post-surgery ( $\rho=0.53$ ,  $P < 0.05$ ). There was no significant difference in the mean deviation magnitude over a 12-months period post-surgery ( $F(1.266, 50.631) = 0.227$ ,  $P < 0.001$ ).

**Conclusion:** The good success rate and stability in the ocular alignment suggests strabismus surgery as a good treatment for intermittent exotropia patients.

**Keywords:** intermittent exotropia, surgery, strabismus