

Abstract

The Outcomes of Horizontal Strabismus Surgery

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Objectives: To evaluate the surgical outcomes of horizontal strabismus.

Study Design: A prospective interventional study.

Subjects and Method: The study was conducted on 62 patients who underwent their first horizontal strabismus surgery at the Department of Paediatric Ophthalmology and Strabismus, Chittagong Eye Infirmary and Training Complex, Chittagong, Bangladesh from January 2008 to December 2008. Guidelines in planning surgical amounts for esotropia and exotropia followed Marshall Park's formula. The main outcome measure for successful surgery was defined as eye deviation 10 prism diopters or less at 6 weeks post-surgery.

Results: 62 patients including 28 males (45.2%) and 34 females (54.8%) were enrolled in the study. The mean age was 15.7 ± 8.7 years and median was 16 years (range = 03-39 years). 29 (46.8%) cases had esotropia and 33 (53.2%) cases had exotropia. Among the esotropia 16 (55.2%) were male and 13 (44.8%) were female. Among the exotropia 12 (36.4%) were male and 21 (63.6%) were female. The mean of preoperative and postoperative deviations were 45.0 ± 13.0 and 12.2 ± 7.2 prism diopters respectively. The overall successful surgery was 62.9% (39/62). The success rate in the esotropic group was 65.5% and in the exotropic group was 60.6%. There was statistical significance in the pre-operative angle deviations related to surgical success ($p < 0.001$).

Conclusion: The surgical success rate of horizontal strabismus surgery in the current study was 62.9%. Other than suture granuloma no other post operative complications were found. Al-Shifa Journal of Ophthalmology 2009; 5(2): 63-66 © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.