

Improvement of Visual Acuity in Patient Undergoing Occlusion Therapy

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Abstract : Purpose: To determine the improvement of visual acuity in patients undergoing occlusion therapy. Methods: This was a prospective hospital-based study of newly diagnosed of amblyopia seen at the pediatric clinic of Chittagong Eye Infirmary & Training Complex. There were 32 refractive amblyopia subjects were examined & questionnaire was piloted. Included were all patients diagnosed with refractive amblyopia between 5 to 8 years, without previous amblyopia treatment, and whose parents were interested to participate in the study. Patients diagnosed with strabismic amblyopia were excluded. Patients were first corrected with the best correction for a month. When the VA in the amblyopic eye did not improve over a month, then occlusion treatment was started. Occlusion was done daily for 6-8 h together with vision therapy. The occlusion was carried out for three months. Results: Out of study 32 children, 31 of them have a good compliance of amblyopic treatment whereas one child has poor compliance. About 6% Children have amblyopia from Myopia, 7% Hyperopia, 32% from myopic astigmatism, 42% from hyperopic astigmatism and 13% have mixed astigmatism. The mean and Standard deviation of present average VA was 0.452 ± 0.275 Log MAR and after an intervention of amblyopia therapy with vision therapy mean and Standard deviation VA was 0.155 ± 0.157 Log MAR. Out of total respondent 21.85% have BCVA in range from (0-.2) log MAR, 37.5% have BCVA in range from (0.22-0.5) log MAR, 35.95% have in range from (0.52-0.8) log MAR, 4.7% have in range from (0.82-1) log MAR and after intervention of occlusion therapy with vision therapy 76.6% have VA in range from (0-.2) log MAR, 21.85% have VA in range from (0.22-0.5) log MAR, 1.5% have in range from (0.52-0.8) log MAR. Conclusion: Amblyopia is a most important factor in pediatric age group because it can lead to visual impairment. Thus, this study concludes that occlusion therapy with vision therapy is probably one of the best treatment methods for amblyopic patients (age 5-8 years), and compliance and age were the most critical factor predicting a successful outcome.

Keywords : amblyopia, occlusion therapy, vision therapy, eccentric fixation, visuoscopy

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