

15^Δ-25^Δ were included. Preoperative and postoperative sensorimotor exams were compared.

Results: Preoperatively, all patients had symptomatic esodeviation (mean, 17^Δ ± 2.83^Δ). Postoperative visits at <2 weeks resulted in an average angle of deviation at distance of 2.21^Δ ± 2.93^Δ ($P < 0.0001$) for all patients. Postoperative visits with 13 of the 19 patients at greater than 6 months resulted in an angle at distance of 4.31^Δ ± 4.09^Δ ($P < 0.0001$). Two patients were treated with prism glasses and one other with surgery for residual diplopia. No patients had symptoms from lateral incomitancy.

Discussion: Primary single muscle resection has not been typically performed except in divergence insufficiency. It is usually reserved for undercorrected or recurrent strabismus. Patients showed improvement in binocular function and had additional benefits of shorter anesthesia time, faster recovery, and less cost.

Conclusions: Unilateral lateral rectus resection as a primary procedure can be an effective surgical option in the management of adult patients with moderate angle esodeviation.

056 Ocular Trauma Score (OTS) versus adapted OTS in pediatric open globe injuries. Nashwa Badr Eldine, Maha M. Youssef, Ghada Gawdat, Ghada Osama

Introduction: Ocular Trauma Score (OTS) is a categorical system used for standardized assessment and visual prognosis of ocular injuries. Relative afferent pupillary defect (RAPD) is a variable that is difficult to assess in pediatric patients. An adapted OTS score was suggested excluding RAPD. In this study, we compare the prognostic value of OTS and adapted OTS in predicting the likely visual outcome of pediatric patients with open globe injuries.

Methods: A prospective observational study including children with open globe injuries. Initial and final best corrected visual acuity (BCVA) (after 3 months) were recorded as follows: (1) NLP (no light perception); (2) LP to HM (light perception to hand movement); (3) 1/200 to 19/200; (4) 20/200 to 20/50, and (5) ≥20/40. OTS and adapted OTS were calculated and compared regarding the prediction for final visual outcome.

Results: A total of 130 patients were included, ages (4-18; mean, 10.06 ± 3.94 years). The median initial visual acuity category (LP to HM) significantly improved to 20/200-20/50 ($P < 0.001$). OTS parameters analysis showed that the initial visual acuity category, retinal detachment and RAPD had a highly significant impact on final visual outcome ($P < 0.001$). The final visual acuity according to OTS and adapted OTS prediction was comparable with the achieved final visual outcome. Comparing both scores as a whole, OTS had a higher predictive value however not statistically significant ($P = 0.55$).

Discussion: Excluding RAPD would still make the OTS reliable and highly prognostic while rendering it much easier to apply.

Conclusions: Adapted OTS can be reliably used among pediatric patients.

057 Surgical outcomes for esotropia in children with high AC/A ratio. Reecha S. Bahl, Monique J. Cheng, Sabrina Dass

Introduction: To assess if high accommodative convergence/accommodation ratio (AC/A) impacts surgical outcomes in children with esotropia (ET).

Methods: A retrospective chart review identified patients who underwent primary bilateral medial rectus recessions (BMRc) for ET. High AC/A was defined as an increase of ≥10^Δ deviation at near compared to distance. Outcome parameters were: (1) near and distance deviations ≤10^Δ within orthophoria, and/or (2) presence of stereopsis (positive fly) postoperatively. Analysis used Yates' continuity correction, the Fischer exact test, and unpaired t test.

Results: Of 116 charts identified, thirty had a high AC/A preoperatively compared to 86 with normal AC/A. Mean age was 3.90 years (SD 2.71 years). Surgical success measured by postoperative alignment were 43% and 40% in the high AC/A and normal AC/A groups, respectively ($P = 0.88$). There was a statistically significant difference in postoperative stereopsis success, with 16% of patients with normal AC/A versus 44% of patients with high AC/A having positive fly on postoperative stereopsis testing ($P = 0.03$).

Discussion: In the setting of ET treated with BMRc, the presence of high AC/A does not affect surgical success as measured by postoperative alignment. However, patients with high AC/A preoperatively had a significantly improved surgical success as measured by postoperative stereopsis, compared to those with a normal AC/A. This difference is likely related to a partially accommodative etiology of misalignment when a high AC/A is present, compared to nonaccommodative esotropia with normal AC/A, with the latter having a lower probability of postoperative fusion.

Conclusions: Our findings can guide clinicians in their decisions regarding surgical treatment of patients with ET.

058 Music therapy may decrease apnea associated with retinopathy of prematurity exams. Susan M. Bakouros, John Evered, Kristin Rarey

Introduction: Many premature newborns need to be screened for retinopathy of prematurity (ROP). During and after ROP screening exams, newborns are at high risk for apnea, bradycardia and desaturation (ABD). NICU music therapy (NICU MT), has been shown to improve physiologic stability, including heart rate and oxygen saturation.

Methods: A NICU music therapist provided procedural support during ROP screening exams ($n = 46$) done with digital retinal imaging (DRI), to determine if NICU MT might help decrease screening-related ABD.

Results: For all 46 DRI exams, the mean number of ABD events in the 24 hour period before the DRI exams was 0.54, and in the 24 hour period following the exam, the mean number of ABD events was 0.41 ($P = 0.35$, 95% confidence interval, -0.15 to 0.41). Following ROP screening with NICU-MT, no infants had escalation of respiratory support, serious infection, or feeding interruption.

Discussion: This is the first study to evaluate the ability of NICU MT to decrease procedure-related ABD events in premature infants. It is also the first study of NICU MT during ROP screening. We found no increase, and a trend toward decrease, in post-procedure ABD when NICU MT was used during the ROP exam.

Conclusions: Our findings suggest that NICU MT during ROP screening exams using DRI is safe and may be associated with a decrease in post-procedure ABD events, consistent with other findings in the literature showing that NICU MT may decrease pain and improve physiologic stability in preterm infants.

059 Does the newer anti-vegf therapy impact neurodevelopmental outcomes more than conventional laser therapy in infants treated for retinopathy of prematurity? L. Daphna Y. Barbeau, Swati Agarwal

Introduction: To compare the neurodevelopmental outcomes in infants who have and who have not received bevacizumab injections (anti-VEGF) and or laser therapy for Retinopathy of Prematurity (ROP) treatment. We hypothesize that the neurodevelopmental outcomes may be similar by group, or that differences in outcomes might