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were female (46.0%). Both eyes were involved in 1180 (54.3%), the right eye alone in 506 (23.3%), and 489 (22.5%) in the left. Five hundred seventy-six (26.5%) of the 2,175 were diagnosed at =60 days of life, from which topical cultures were obtained in 111 (19.7%). Only 56 of the cultures (32.4%) showed bacterial agents with Chlamydia present in 3. Treatment for infantile conjunctivitis, where recorded, included topical antibiotics in 523 (90.8%) and simple observation in 47 (8.2%).

**Conclusion/Relevance:** Conjunctivitis in the first year of life occurred in approximately 10% of infants in this population-based cohort. More than half involved both eyes, one quarter were identified in the first 60 days of life, and sight-threatening infectious agents were rare.

145 **Full field electroretinography with skin electrodes to diagnose inherited retinal disease in pediatric patients.** Katherine Brown, Scott Atkinson

**Introduction:** A single-site retrospective study was undertaken to validate a handheld electroretinogram (ERG) system utilizing skin electrodes to complete full-field ERGs as a stand-alone test in the workup for inherited retinal disease.

**Methods:** Between October 2016 to December 2020, 73 patients between the ages of 1 month and 18 years old obtained a full-field ERG with the RetEval system and subsequent genetic testing. During this time there were no sedated or anesthetized ERGs performed at this institution. The patients underwent ERG testing by ISCEV standard; however, the bright flash dark-adapted b-wave amplitude and the light-adapted 28 Hz flicker amplitude were chosen as the measure of rod and cone system function respectively. The normal range for these values had been determined and was reported by Keck et al.

**Results:** In 76.7% of patients the rod and cone function as measured with this modality agreed with the diagnosis found on subsequent genetic testing. 70.5% of patients with both abnormal cone and rod function, 80% of patients with only abnormal cone function and 83.3% of patients with only abnormal rod function were diagnosed with expected inherited retinal diseases by genetic testing.

**Conclusion/Relevance:** This study provides evidence that the diagnosis of inherited retinal disease can be reliably obtained with the handheld ERG system with skin electrodes in children of all ages when using the 5-step test as outlined by ISCEV. Sedation and anesthesia to perform ocular surface contact electrode ERG may be unnecessary in most cases.

146 **Small tuck for superior oblique palsy.** Chavisa Bunyavee, Alexander Miranda, Steven Archer

**Introduction:** Some surgeons only treat superior oblique (SO) palsy with a tuck when the SO tendon is lax, either for fear of creating a secondary Brown syndrome or out of belief that a lax tendon signifies a distinct etiology that uniquely responds to SO tuck. This study reports a series of patients with SO palsy treated by small SO tuck in whom lack of tendon laxity precluded a larger tuck.

**Methods:** Retrospective record review of consecutive patients with unilateral SO palsy who underwent isolated SO tuck ≤6 mm from 2000-2016 at Kellogg Eye Center, University of Michigan.

**Results:** Twenty-seven cases met inclusion criteria. The mean SO tuck (total, both sides of tuck) was 4.9 mm (range, 2–6 mm). After surgery, mean hypertropia decreased from 11.6 to 3.7 in primary position, from 19.8 to 6.6 in the SO field of action, and lateral incomitance [difference in hypertropia between contralateral and ipsilateral gaze] decreased from 11.6 to 1.9 (P < 0.001 in each case). Six patients had diplopia in upgaze that was not symptomatic enough to require reoperation. Six patients had residual hypertropia requiring additional surgery.

**Conclusion/Relevance:** Small SO tuck is an effective surgical option for SO palsy when the greatest deviation is in the SO field of action and there is marked lateral incomitance, even in the absence of tendon laxity.

147 **Global virtual strabismus surgery teaching for ophthalmology residents during COVID-19.** Alison X. Chan, Erin Dohaney, Wilma M. Hopman, Rita Gama, Ramesh Kekunnaya, Yi Ning J. Strube, John Ferris, David B. Granet

**Introduction:** In response to the COVID-19 pandemic, the World Society of Pediatric Ophthalmology and Strabismus (WSPOS) piloted strabismus surgery simulation webinars providing real-time surgical instruction using an accessible model eye. The purpose of this study was to demonstrate improvement in confidence level with strabismus surgery among ophthalmology residents who participated in the webinar.

**Methods:** Five strabismus surgeons (from 5 different countries) taught 10 beginning ophthalmology residents (from 5 different countries) using a homemade model eye and a cell phone streaming the surgical view. Surgical techniques taught included needle handling, scleral passes, and suturing extraocular muscles. Residents watched a video demonstrating techniques prior to the webinar. Three surveys completed Pre-Video, Post-Video, and Post-Webinar evaluated comfort level in surgical skills using Likert scales. Survey responses were analyzed using paired t tests and repeated measures ANOVA (SPSS v24). Queen’s University Health Sciences Research Ethics Board approval was obtained.

**Results:** Nine of 10 trainees answered the surveys: 66% were 25-29 years old; 62.5% were second-year residents. Paired t test showed a statistically significant increase in comfort level in performing scleral passes, suturing an extraocular muscle, and creating a locking bite at the muscle pole between Pre-Video to Post-Webinar surveys (P < 0.05). Exploratory repeated measures ANOVA revealed improvements in scores for 4 of the 5 questions (P < 0.05).

**Conclusion/Relevance:** Our pilot study demonstrates effective teaching of strabismus surgery techniques virtually using an accessible model eye. Virtual teaching allows delivery of world expertise teaching to trainees worldwide, diminishing barriers to learning and improving eye care to patients globally.

148 **Non–Descemet stripping endothelial keratoplasty in an adolescent with aphakia and glaucoma drainage device.** Seung Ah Chung, Beera Mehparpa, Jade M. Price, Alex V. Levin

**Introduction:** Pediatric keratoplasty can be surgically challenging due to softer tissues and difficulties maintaining postoperative positioning. These challenges are magnified in the setting of aphakia or previous glaucoma tube surgery as the air bubble for tamponade may migrate to the posterior segment or out of the eye via the tube. We describe the first pediatric case with aphakia and a glaucoma drainage device undergoing non–Descemet stripping endothelial keratoplasty (nDSEK).