30% of the population. Common treatments for both include treating the underlying systemic etiology, oxygen therapy for CRAO, and focal laser photocoagulation for persistent macular edema after a CRVO. New treatments include Avastin, an injectable antivascular endothelial growth factor (VEGF) drug, which reduces retinal edema thereby improving vision. Research trials on standardizing anti-VEGF's role in treatment and outcomes are ongoing.

Case Report: An 82-year-old white man presented to the eye clinic with sudden onset of decreased vision in his only seeing eye, the right eye (OD). Later in the day, he noticed loss of his superior visual field in the right eye. A previous traumatic event resulted in blindness of the patient's left eye. Patient's entering visual acuity at distance was 20/150 OD with no improvement after refraction. Right pupil was reactive to light, confrontation fields were full to finger count OD, and motility was full range of motion both eyes. Slit lamp examination of the right eye was within normal limits. Dilated fundus examination of the right eye found hemorrhages along both arcades of the posterior pole with edema and an area of whitening below the macula. The patient had CRVO and a CRAO diagnosed in the right eye. After confirmation from a retinal specialist, the patient received Avastin treatment returning his vision to 20/40 OD within 6 months of initial presentation.

Conclusion: In the past, vision prognosis after a vein and/or artery occlusion was guarded to poor. With the introduction of anti-VEGF injectables, such as Avastin, visual outcomes are improving. Awareness of new treatments, immediate diagnosis, and proper referral by optometric physicians will ensure the best visual outcome for the patient.

Poster 40

Cross-Over Evaluation of Blink Tears Versus Systane Ultra in Mild Dry Eye Patients

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Background: The purpose of this study was to evaluate the efficacy of Blink Tears versus Systane Ultra for the treatment of mild dry eye signs and symptoms.

Methods: This was a randomized, investigator-masked crossover evaluation of 40 patients (80 eyes). Included patients were those with mild dry eye symptoms per patient reporting/physician assessment and were not currently using any artificial tears regularly or using low viscosity tears for symptom relief (Refresh Tears, Visine Tears, Tears Naturelle, etc.). Patients were randomly assigned to instill either Blink Tears or Systane Ultra in each eye 4 times daily for 1 month. Patients were crossed over after 1 month to the other drop. Study visits were at baseline, month 1, and month 2. Outcome measures included TBUT, VA, and lissamine green staining, and patients completed a dry eye questionnaire.

Results: Blink Tears significantly improved TBUT after 1 month of treatment (increase of 2.4 seconds, $P=0.003$), while there was no significant improvement with Systane Ultra (increase of 0.3 seconds, $P=0.320$). No significant changes were noted for staining or visual acuity. Patients reported that Blink was more soothing, improved vision, was less blurring, and was more comfortable than Systane Ultra ($P<0.043$).

Conclusion: Blink Tears improved TBUT and the symptoms of dry eye significantly better than Systane Ultra. Patients preferred Blink Tears.

(Received funding for the research.)

Poster 41

Utilization of Pattern Recognition Along With Depth Cues Facilitates SD OCT Diagnosis

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Purpose: To determine whether pattern recognition of SD OCT images as well as depth cues can improve diagnostic yield (in a similar manner as to how many retinal specialists use pattern recognition and depth cues in ophthalmoscopy, photography, and fluorescein angiographic, differential diagnosis).

Methods: A retrospective review of 1,100 SD OCT cases was performed with either the Heidelberg Spectralis, the Zeiss Cirrus, the Topcon 3D OCT 1000, or the Optovue RTVue100. Three trained observers noted and recorded OCT patterns associated with specific diseases. Depth of lesions in specific disorders was also noted and recorded. Each OCT finding (pattern or depth) as it related to a specific disease entity was assigned to 1 of 3 categories: (1) Pathognomonic for the disease, (2) Commonly found in the disease but not pathognomonic, or (3) Randomly associated with the disease (it was shared in numerous other diseases as well).

Results: Twelve SD OCT patterns emerged that appear to be pathognomonic of 12 disorders. For example, only in achromatopsia was there total absence of the IS/OS junction that was limited to the central 800u by 600u with all other retinal layers intact. Other patterns emerged in rod-cone degeneration, cone-rod degeneration, central serous choroidopathy, retinal macro-aneurysm, intraretinal perfluorooctane, macular telangiectasia type 2, retinoschisis, plaquenil toxicity, and solar retinopathy. In addition, posterior vitreal traction (VM, VP, VR), and full-thickness macular hole were predictably pathognomonic. Commonly found but not pathognomonic: outer retinal tubulations found in 2 cases of Bietti but also found in several other retinal degenerations. Exudates in and around the outer plexiform layer are common in diabetic retinopathy but also found in hypertensive retinopathy, vein occlusion, and macroaneurysms. Seven other findings fell into this category.

Conclusions: Pattern recognition, during ophthalmosocpy reviewing fundus photographs and in fluorescein angiography, is very useful in SD OCT interpretation. Pattern recognition of "pathognomonic" findings often facilitates