Central American and Caribbean groups ($P = 9.6 \times 10\text{-}5$), but not between Central and South American groups ($P = 0.13$).

Conclusions: There is statistical evidence showing differences in magnitude of manifest astigmatism among varying regions of origin. The majority of astigmatism tends to be corneal in all groups. Spanish-speaking children from South America and Central America tend to show greater magnitudes of manifest astigmatism without significant difference between the 2 groups. However, both groups show significant differences in the amount of astigmatism versus Caribbean children, who tend to show less manifest astigmatism overall.

Poster 68

A Comparison of Efficacy Between Systane® Ultra and OPTIVE™ Lubricant Eye Drops When Tested With Dry Eye Patients

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Purpose: The aim of this study was to evaluate efficacy of a PEG/PG-based lubricant eye drop versus a glycerin/CMC-based tear under arid environmental conditions.

Methods: This was a double-masked, randomized, parallel study design of 42 days' duration. A total of 105 patients were evaluable for intent-to-treat. Patients had to have >3 sum of corneal stain (NEI grid; Max 15 pts) and had to answer that they needed artificial tears at least "some of the time" to be enrolled. The PEG/PG (Systane® Ultra) Lubricant Eye Drops (Alcon) is a multi dose formulation stored at pH 7.9 in the bottle. HP-Guar is the gelling agent that helps hold the active demulcents onto the eye, allowing for healing. The glycerin/CMC-based tear (Optive; Allergan, Inc.) was used as the control. Study patients used a saline drop 4 times a day for 14 days before randomization on treatment. Patients were told to use their assigned drops 4 times a day for the duration of the 6-week study. Corneal and conjunctival staining was evaluated at each visit. Symptoms were evaluated using a Treatment Satisfaction Questionnaire and VF-14 Questionnaire.

Results: A significant difference in corneal staining mean score favoring the PEG/PG relative to the glycerin/CMC drop was found overall ($P = 0.0172$) and at day 14 ($P = 0.0009$) and at day 42 ($P = 0.0106$). There was also a significant difference in conjunctival staining favoring the PEG/PG drop noted at day 28 ($P = 0.0475$) and day 42 ($P = 0.0009$) and overall ($P = 0.0268$). There were no significant differences between treatments for symptoms, but both demonstrated significant reductions from baseline at the exit visit. Finally, no difference in TFBUT was seen.

Conclusions: These studies showed that the PEG/PG-based lubricant eye drop demonstrated statistically significant reductions in both corneal and conjunctival staining versus the glycerin/CMC drop. Symptoms were similar between test arms. This study shows superior stain reduction of the PEG/PG lubricant eye drop over a 6-week period.

(Investigators are employees of Alcon Research Ltd. Clinical Trials Identifier number: NCT00702377)

Poster 69

Optic Nerve Head Pallor Associated With a Sphenoid Wing Meningioma

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Background: Sphenoid wing meningiomas represent approximately 10% of intracranial meningiomas. The most common visual symptom patients with sphenoid wing meningioma present with is unilateral visual loss with optic nerve atrophy. Additional effects include headaches, visual field defects, and nerve fiber layer loss. In-office diagnostic tests include color vision testing, visual field exams (VFE), and optical coherence tomography (OCT). CT scan and/or MRI confirm diagnosis. Treatment options include radiation therapy and resection depending on age and location of the meningioma. Because of the involvement of other structures with sphenoid meningiomas, surgical treatment often may lead to visual complications.

Case Report: A 77-year-old white man presented to the eye clinic at West Haven VAMC for an eye examination. The patient's visual acuity was 20/25 + O.D. and 20/40 + O.S. Pupils were equally round with O.S. being less reactive than O.D. without an afferent pupillary defect. Dilated fundus examination showed optic nerve pallor O.S. with questionable pallor O.D. Color vision was normal in both eyes. VFE O.D. was clear, but overall field defects were noted O.S. OCT also showed nerve fiber layer thinning temporally O.S. MRI showed a left sphenoid wing meningioma extending from the sella to the left middle cranial fossa, with the mass encasing the left internal carotid artery as it exits the cavernous sinus. The patient refused treatment and chose to be carefully followed up with by optometry and neurology. On follow-up examinations, the patient's vision deteriorated to 20/80 O.S., and a left afferent pupillary defect was detected.

Conclusion: In patients presenting with decreased visual acuity associated with optic nerve pallor, sphenoid meningioma must be on the differential diagnosis. Tests that can assist in the diagnosis can include color vision, VFE, OCT, and imaging such as CT and MRI. Treatment options may not always be viable. In some sphenoid meningioma cases, the risks of treatment may outweigh the benefits, especially in elderly patients. Often, careful monitoring with repeat testing of visual acuities, visual fields, and imaging