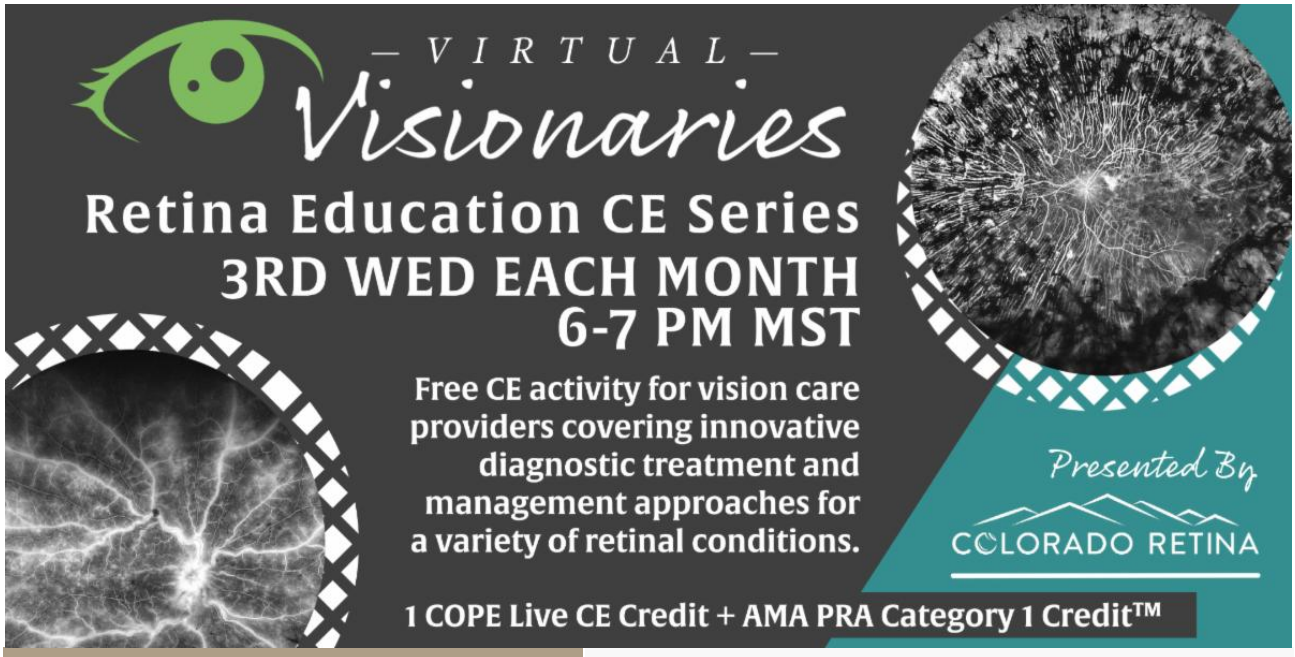
COLORADO RETINA

UPCOMING EVENTS

COPE ACCREDITED VIRTUAL CE COURSES

VIRTUAL VISIONARIES



MANAGING PEDIATRIC EYE DISEASE

WED, APRIL 21, 2021
6-7 PM MST
Virtual @ Zoom

REGISTER

Virtual Visionaries is a continuing education (CE/CME) virtual series, held on the third Wednesday each month, covering a mix of retina and uveitis topics and complex cases.

Pediatric optometrists, ophthalmologists and retina specialists work together closely to co-manage 0-18 y/o patients to provide optimal comprehensive care. This course will bring you the expertise from each field, covering the common pediatric eye problems seen by optometrists, including how to manage those conditions initially, when to refer, and next-steps to continue assisting with co-management. Clinical evaluation, treatment

Once pre-registered on Zoom you will receive an email with your personalized webinar login link to join the April meeting.

Accreditation: 1 COPE CE Credit, 1 AMA PRA Category 1 Credit™

Presented by:
- Murtaza Adam, MD - Colorado Retina
- Anna Steele, MD - Children's Eye Physicians
- Sarah Galt, OD - Eye Center of Northern Colorado

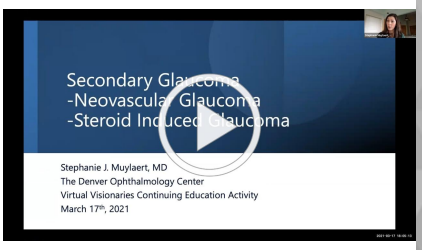
OTHER UPCOMING COURSES:
Wednesday, May 19, 2021
IRD Genetic Testing

options, management recommendations, risk factors, diagnostic red flags, and referral tips and timing will be reviewed in depth. Case-based examples of pediatric cataracts, glaucoma, nasolacrimal duct obstruction, esotropia and exotropia, juvenile arthritis, primary iridocyclistis, Staph marginal disease, cystic macular edema, Coats' disease, Marfan's disease, Leber congenital amaurosis, traumatic retinal detachments, and a variety of other pediatric eye conditions will be covered.

MISSED A PRIOR CE EVENT? ALL PRE-RECORDED PAST COURSES ARE LIVE ON OUR WEBSITE FOR YOUR VIEWING!

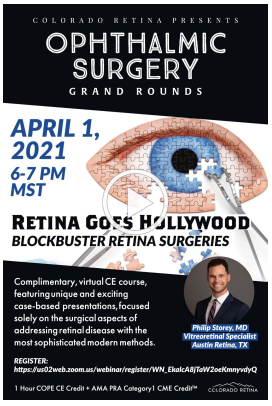
March Virtual Visionaries: *Retina Meets Glaucoma*

Retina and glaucoma overlap in terms of etiologies and treatment, the two subspecialties working closely in managing some of the most challenging eyes in ophthalmology. In our March Virtual Visionaries lecture, Drs. Brian Jooondeph and Stephanie Muylaert reviewed retinal causes of glaucoma, including neovascular and steroid induced glaucoma, and discussed risk factors, diagnostic keys and treatment options. Retina specialist, Dr. Joondeph and ophthalmologist Dr. Muylaert provide unique perspectives on these overlapping conditions.



Ophthalmic Surgery Grand Rounds: *Retina Goes Hollywood*

In the April 2021 quarterly edition of Ophthalmic Surgery Grand Rounds, vitreoretinal specialist, Dr. Philip Storey of Austin Retina presented a Hollywood reel of blockbuster retinal surgeries. This special retina-round-up covered pre and post-operative surgical advancements and tools and techniques used in a variety of entertaining and unusual retinal procedures that have set the bar higher. Through the presentation of surgical videos, education on modern methods that effectively address multiple sight-threatening retinal diseases and conditions are discussed, all to a "groovy" Austin-Powers soundtrack.



VIEW ALL PAST COURSES

REFERRING PROVIDER BENEFIT

PRIVATE EDUCATIONAL ACTIVITIES SPECIFICALLY CURATED FOR YOUR OFFICE.

Did you know as a benefit to our referring community our team offers complimentary in-person or virtual

accredited CE, CME or JCAHPO retina-based courses for your doctors and/or support staff? 1-2 Colorado Retina physicians of your choice will provide your office with a lunch-time 25-45 minute retina-based educational course on the subject matter of your selection. And as an added perk, we provide lunch on us for your your whole office! Scheduling is made per your preference and availability.

Don't want the course, but would like to schedule a Zoom call to get to know our providers? That works too! We value direct and personal communication between our office and yours and would love the opportunity to get to know your providers, referral preferences, and feedback on how we can better serve you.

To schedule or learn more, reach out to our Colorado Retina Marketing Manager, Kendall Johnson at **kjohnson@retinacolorado.com**.

REQUEST A COURSE

PRACTICE UPDATES

WHAT'S NEW AT COLORADO RETINA ASSOCIATES

WE ARE MOVING OUR GOLDEN-RED ROCKS CLINIC & RESEARCH DEPARTMENT TO LAKEWOOD ON APRIL 20!

THE TIME HAS OFFICIALLY COME! Our Golden-Red Rocks clinic and Clinical Research Department are moving to one consolidated new space in Lakewood! **Our last clinic/research day at the current Golden location is Tuesday, April 13, 2021. We will start seeing patients at our new Lakewood location at 8am on Tuesday, April 20, 2021**. **If your patient requires to be seen on an urgent basis during our Golden closure, please call our triage team at (303) 261-1600 x1** to schedule at one of our other 4 Denver Metro service locations: **Lowry**, **Englewood**, **Lafayette** or **Parker**, CO.

The new Colorado Retina Lakewood office is conveniently located just 3 miles south east of our, soon to be closed Golden clinic, off 6th Ave Freeway and Union Blvd. We will be located in St. Anthony Medical Plaza 3, a brand-new medical facility.

We are excited to announce all 13 of our CRA physicians will see patients at the new Lakewood clinic! The layout and workflow was designed solely by the staff and physicians of Colorado Retina

around LEAN principles. The new office's layout allows us improve patient satisfaction through the offering of additional available appointment slots, shorter wait times, and an overall shorter appointment duration for the patient.

We apologize for any inconvenience and thank you for your continued referral support. If you and your team would like to come tour the new space, please schedule a time with our Marketing Manager, **Kendall Johnson**, we would love to show you around!

We look forward to continuing to serve you and your patients at our Lakewood location!

NEW LAKEWOOD ADDRESS - OPENING 4/20/21
St. Anthony Medical Plaza 3
255 S. Routt Street, Suite 200, Lakewood, CO 80228

REQUEST NEW REFERRAL MATERIALS

SCHEDULE A TOUR OF THE OFFICE

CASE OF THE MONTH

REAL CASES OF YOUR REFERRED PATIENTS

HIGH ALTITUDE CAUSES ACUTE VISION LOSS IN COLORADO TOURIST.

PETER G. HOVLAND, MD, PhD
TUMOR + RETINA SPECIALIST AT COLORADO RETINA

The prospects of hiking the Colorado Trail brought a 38-year-old man from Michigan to the Rocky Mountains in the summer of 2019. After hiking above 12,000 feet for four days, he noted his vision was worsening in both eyes. It was painless and troubling especially as he was also experiencing acute altitude illness with headache and shortness of breath. Seeking help, he presented to Dr. Paul Cook, an Optometrist at Summit Eye Center in Frisco, CO.

Upon exam, Dr. Cook found the patient was experiencing 20/60- vision OU, No APD, and significantly, profound cystoid macular edema (CME) in both eyes. There were also pigmented “bone spicule” changes in the periphery. A detailed history revealed the patient had a previously known diagnosis of retinitis pigmentosa (RP), though had enjoyed excellent vision until then. Dr. Cook sent the patient over to Colorado Retina’s **Summit County satellite clinic**, where the patient was urgently examined.

The unusual appearance of the retina most resembled a central retinal artery occlusion (CRAO) in each eye. There was a whitening of the retinal arterial vasculature with profound macular thickening. The OCT, however, revealed CME, and subretinal fluid, and an absence of inner retina hyper-reflectivity, and therefore the diagnosis was not CRAO. How to treat?

The effects of high altitude on the retina have been described in hikers of the Himalaya’s, and in various military personnel around the world. Retinal hemorrhages are a common finding; yet macular edema has never been described as a result of altitude.

The effects of higher altitude and lower atmospheric oxygen on the pulmonary and circulatory systems are well known, resulting increased respiration rate and changes of the pH of the blood. This respiratory alkalosis contributes to the acute high-altitude illness and may be treated with medicines of a class known as carbonic anhydrase inhibitors (CAI). Interestingly CAI’s have been shown to decrease macular edema associated with certain retinal conditions, including retinal dystrophies such as RP.

The diagnosis was determined to be a rare RP-associated CME precipitated by altitude

elevation. The treatment recommendation was to urgently return to lower altitude by car travel and initiate medical therapy with topical and oral CAI. The following day the patient reported (from the lower altitude of Nebraska) that his vision was much improved. Days later he was evaluated by the retina department at the University of Michigan, who determined that his CME was resolving quickly. By then his vision had returned to normal. This interesting case was published in the journal of Ophthalmic Genetics. An exciting adventure with a fortunate conclusion!

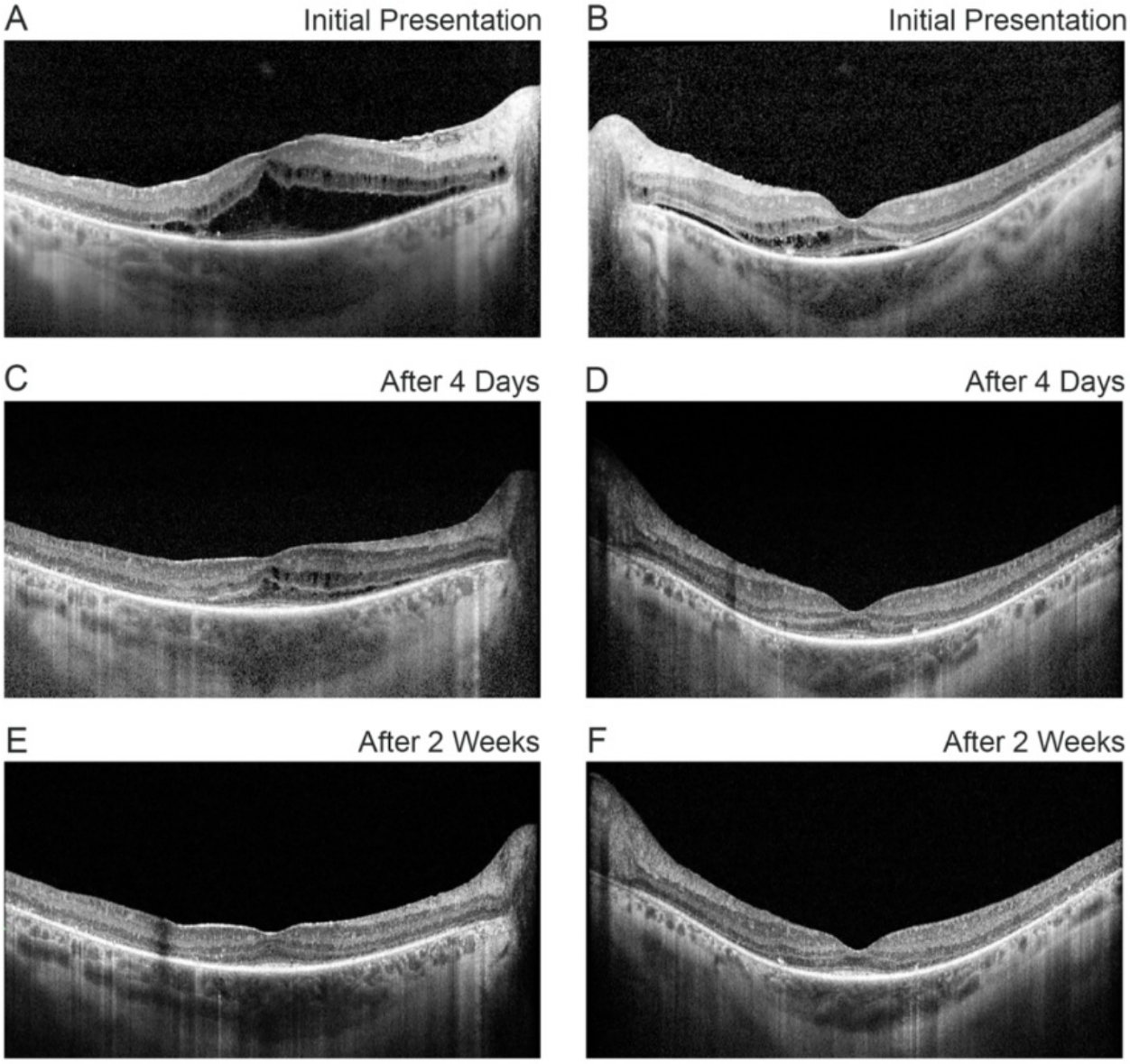


Figure 1. Macular OCT's of the right and left eyes respectively before and after treatment. (reproduced from Zhao PY, Hovland PG, Fahim, AT, *Ophthalmic Genetics*, 41(3) 275-278, 2020)

FEATURED NEWS ARTICLES

PRESS RELEASES & RESOURCES FROM OUR VITREORETINAL SPECIALISTS

AN ELUSIVE CASE OF CYSTOID MACULAR EDEMA.

A common IOP-lowering drop can uncommonly be a cause of decreased vision.

BRIAN JOONDEPH, MD, MPS, FACS

Samantha Schilling, BA, OSC

Curtis Brobst, BA, COA, OSC

Brian C. Joondeph, MD, MPS

Cystoid macular edema (CME) is a common manifestation of many retinal diseases. Often, the underlying etiology, such as diabetic retinopathy, macular degeneration, or retinal vein occlusion, is obvious based on clinical examination. Recent cataract surgery or active uveitis are other common causes of CME and are readily apparent based on history or examination. Occasionally, CME may manifest without an obvious cause or underlying condition, perhaps noted on a routine and otherwise unremarkable eye examination. We recently encountered a case of CME with a surprising—although not unheard of—etiology, reminding us to look beyond the obvious and keep elusive etiologies in mind when the usual CME culprits don't apply.

CASE REPORT. A 55-year-old man with recently diagnosed glaucoma presented with blurred central vision, redness, and ocular irritation in his left eye. He had been prescribed several different drop regimens to control his IOP, the most recent being latanoprost 0.005% once daily, which he had been using for several weeks unilaterally in the left eye.
His ocular history included repair of a pseudophakic macula-on retinal detachment in his left eye 5 years ago, with resulting VA of 20/20 OS and a mild, non-clinically significant epiretinal membrane.

On examination, VA was 20/30 OS, with normal IOP and CME noted on OCT (Figure 1). There were no signs of macular degeneration, retinal vascular disease, or uveitis, only the previously noted mild epiretinal membrane. In addition, the timing of the vision decrease, the unilateral CME, and onset of prostaglandin use in the same eye (not bilaterally) was suggestive of a causal relationship.

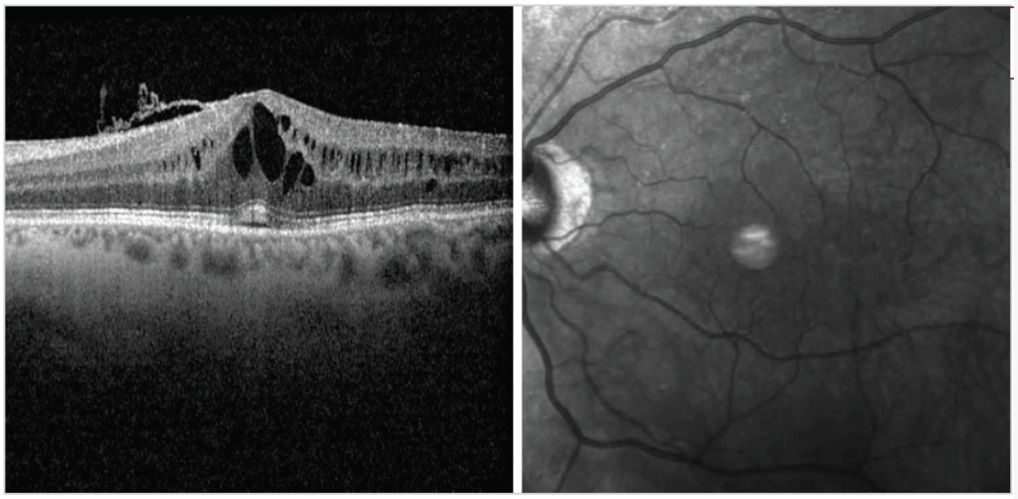


Figure 1. OCT shows CME related to latanoprost administration.

We recommended discontinuation of latanoprost. The patient saw a glaucoma specialist who substituted brimonidine 0.15% twice daily. One month later, his VA had improved to 20/20 OS with almost complete resolution of symptoms and CME on OCT (Figure 2).

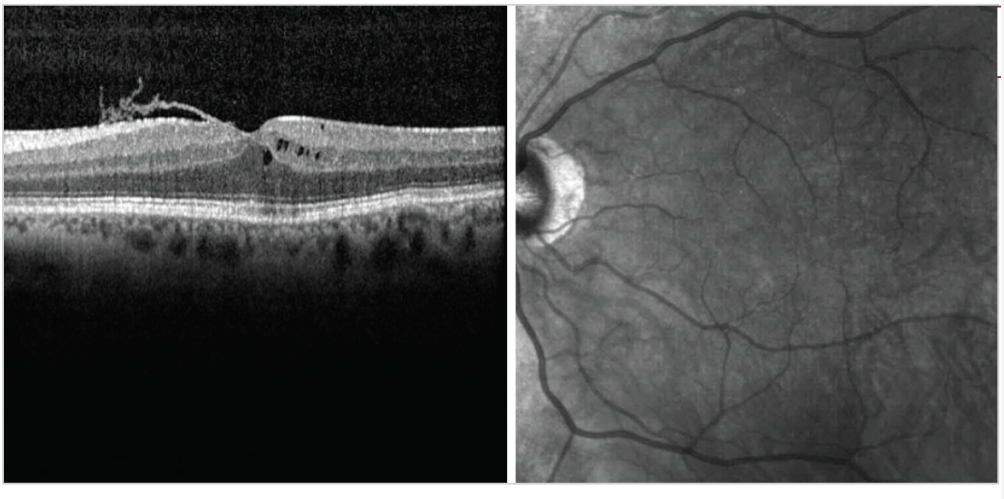


Figure 2. OCT 1 month after discontinuation of latanoprost shows resolution of CME.

DISCUSSION

Prostaglandin analogues are often used to reduce IOP in patients with ocular hypertension or glaucoma. These drops are often used as first-line therapy due to their convenient once-daily dosing. Common side effects include conjunctival hyperemia, corneal punctate epithelial erosions, and increased iris pigmentation.

A lesser-known side effect of this class of drug is CME, reported with latanoprost and other commercially available prostaglandin analogues.3,4 Preservative-free prostaglandin analogues can produce this same side effect, ruling out the preservative as the cause of the CME rather than the prostaglandin itself. The CME is reversible after discontinuation of the drug.

Interestingly, prostaglandin analogues can be administered distant from the eye and still cause CME. For example, one group of researchers reported a case of CME several days after intracorporeal injection of a prostaglandin E1 for erectile dysfunction.

Although prostaglandin analogues are known to cause inflammation, CME is an uncommon side effect.7 The reason for this remains unknown, but genetic factors or underlying ocular diseases may increase a patient's susceptibility. In addition, other confounding ocular pathologies could make a patient more susceptible to CME, such as epiretinal membrane and macular degeneration. Other risk factors for prostaglandin-induced CME are ocular surgery and damage to the blood-retina barrier, as is the case with uveitis. A patient with a healthy blood-retina barrier is less likely to be affected by prostaglandin-induced CME.

Both ocular and systemic use of prostaglandin analogues should remain on the physician's list of possible causes of CME, particularly when a case presents with no other obvious etiology or when standard treatment is ineffective.

Fortunately, treatment is straightforward, as eliminating the causative drop and replacing it with one of many other IOP-lowering drops can lead to complete resolution of CME. This also holds true with discontinuation of systemic prostaglandin use.

READ FULL ARTICLE

Seen in: *Retina Today. All rights reserved. April 2021 | Medical Retina.*

REFER A PATIENT

REQUEST REFERRAL MATERIALS

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