

# THE RETINA TIMES

EDUCATION. EXPERIENCE. COMPASSION

Spring 2021 · Issue #20



Figure 1

# CASE **STUDY:**

#### Case presentation:

A 38-year-old white male was referred to our clinic for evaluation of acute panuveitis of his better seeing right eye. Panuveitis, a simultaneous inflammation of multiple layers of the eye, is a potentially blinding disease with multiple causes. He had a history of what had been called a toxoplasmosis infection of the left eye at age 3. His left eye had been treated with a steroid injection in the remote past (uncertain if intraocular or periocular), but extensive scarring had resulted in chronic poor vision.

The patient's right eye had been symptomatic for 2-3 days. On presentation, visual acuity in the right eye measured at 20/30+2, while the left eye was limited to hand motions.

Clinical photographs of the right and left eyes can be seen in Figures 1 and 2. The right eye demonstrated vitreous opacity, whitening of the retina superiorly, as well as some scattered retinal hemorrhages. The left eye had extensive scarring in multiple areas with some preretinal fibrosis in the nasal periphery





(note the central blurring in the photo is due to cataract). Fluorescein angiography was performed (Figure 3) which highlighted the vascular involvement corresponding to the retinal whitening seen clinically.

What struck me was the similarity in appearance of the two eyes. The right eye seemed like an earlier version of the left. Moreover, neither eve looked like a typical case of toxoplasmosis. Toxoplasmosis is an infection of the eye by the parasite toxoplasma gondii. It is classically described as a focal retinal lesion with overlying vitreous inflammation, the so-called "headlight in the fog". The previously affected left eye had multiple zonal, rather than focal, areas of scarring. The right eye, likewise, had zonal inflammation, as well as more extensive retinal vascular involvement indicated by the scattered hemorrhages. The vitreous inflammation in the right eye was also more diffuse than would be expected from toxoplasmosis.

My suspicion was that both eyes were cases of retinitis, known as acute retinal necrosis, likely caused by one of the herpes family of viruses (e.g., HSV-1, HSV-2, varicella zoster, cytomegalovirus). Such viruses can lie dormant in the body for years and later reactivate, as in the cases of cold sores and shingles. This could explain both the current event in the right eye and the prior event in the left eye. I recommended he initiate treatment with oral valacyclovir 1000 mg 3 times per day while we obtained a virus panel. In

Figure 5

addition, he was continued on Durezol ophthalmic steroid drops 4 times per day, which had been started by the referring doctor.

The viral panel results returned 5 days later and demonstrated a mild elevation of IgG to cytomegalovirus (>10 U/mL; >0.07 being positive) but a much greater elevation of IgG to HSV-1 (>40 U/mL; >1.09 being positive). Other results were negative. IgG indicates that your immune system has developed a response to a prior infection. Levels of IgG typically stay low, but they will rise in cases of recurrent infection. The higher level of HSV-1 suggested that was the virus involved in the current case.

After an initial worsening of his condition (Figure 4), he began to show improvement. Oral prednisone was added, once the viral panel results were obtained, in order to reduce the inflammatory response. As seen in Figure 5, the border of the retinal whitening eventually became more distinct and the vitreous inflammation began to clear. On his most recent visit, approximately 2 months after symptom onset, his vision was 20/30-2 with no apparent involvement of the central retina. As the vitreous inflammation continues to clear, his visual acuity is expected to return to normal. The areas of retinal necrosis will need to be monitored, as there is a risk of the damaged retina tearing in these locations, potentially leading to retinal detachment.

Submitted by



Figure 3

## PHYSICIAN SPOTLIGHT

Todd J. Purkiss, MD, PhD



Todd J. Purkiss, MD, PhD completed his doctorate in Perception and Sensory Physiology at the University of Louisville Department of Psychological and Brain Sciences, prior to medical school, during which he studied human visual processing.

He later completed his ophthalmology residency at the University of Louisville, being chosen as Chief Resident in his final year. His fellowship training in Medical Retina was completed at the Duke Eye Center. He is currently Vice President of Research for the practice.

Todd J. Purkiss, MD, PhD

Figure 4



### HAT'S **happening**

MAY

7-8



**Spring KOA Conference** Lexington Hyatt Hotel & Conference Center

**KAEPS Spring Conference** Louisville Marriott Louisville East



**CE** @ The Refinery *Jeffersonville*, *Indiana* (3) Credit Hours

#### Training

**Undergraduate BA:** University of Tennessee

PHD:

University of Louisville Department of Psychological and Brain Sciences

**Medical School MD:** 

University of Louisville School of Medicine

Fellowship in Medical Retina: Duke University Eye Center



(800) 627-2020



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# New Office Location PAINTSVILLE

#### Highlands ARH Clinic

713 Broadway St Suite 201 Paintsville, KY 41240 (800) 627-2020



from your friends at Retina Associates of Kentucky

#### (800) 627-2020

Scheduling Fax: (859) 264-2911

#### **MAIN OFFICES**

Lexington 120 N. Eagle Creek Drive, Suite 500 Lexington, KY 40509

Louisville 6420 Dutchmans Parkway, Suite 70 Louisville, KY 40205

Ashland 1700 Winchester Avenue Ashland, KY 41101

#### **OUR OTHER LOCATIONS**

### FORECAST

#### APRIL 7, 2021

Our 1st day seeing patients in our new Paintsville Clinic at Highlands ARH Clinic 713 Broadway St, Suite 201. Dr. Kitchens and the other physicians at Retina Associates looks forward to serving our patients here!



New Louisville clinic location COMING SOON

#### JUNE 2021

Retina Associates is excited to announce that we will be relocating our Louisville clinic to the building next to our current office at 6450 Dutchmans Lane, 1st floor. Thank you for trusting us with your patients' retinal care and supporting our presence in Louisville which enabled this move. This location will give us more space to accommodate patients and grow our clinic for serving the community. We will be sending a letter of correspondence to patients alike and will include a map regarding our new location well before their next appointment. We will also provide you and your office updated referral materials prior to opening. Drs. Stone, Purkiss & our Louisville Team look forward to welcoming our patients in our new Louisville office!

#### JUNE 2, 2021

Retina Associates will host an in-person CE event in Jeffersonville, Indiana. Our Jeffersonville office has been open for almost a year, and we're grateful for the support you've shown us since then. We look forward to meeting in person with an educational event that was postponed from last June. You may reach out to Kristin Willard with interest in registering, kwillard@RetinaKY.com or by mobile (502) 649-3681.

#### JULY 2021

Retina Associates is looking forward to welcoming Aaron Ricca, MD to our team of Retina Specialists. Dr. Ricca is finishing



his Vitreoretinal Surgical Fellowship in Iowa. I hope you'll join us in welcoming him to the Bluegrass!

# RESEARCH

If you are interested in information regarding past clinical trials or participation criteria in our current clinical trials, please contact our research department:

Diana Holcomb - Clinical Research Manager PH (859) 264-2905 | dholcomb@retinaky.com

# CORONAVIRUS (COVID-19)

**Precautions for Safeguarding Our Patients** 

#### Kentucky

Bardstown Danville Frankfort Lexington - West London Paintsville Richmond Somerset

Indiana Jeffersonville

#### **OUR PHYSICIANS**

William J. Wood, MD, Founder (Retired) Rick D. Isernhagen, MD Thomas W. Stone, MD John W. Kitchens, MD Todd J. Purkiss, MD, PhD Belinda L. Shirkey, MD Blake A. Isernhagen, MD Jack L. Hollins, MD Miguel A. Busquets, MD, FACS

- We are taking patients' temperatures at point of entry, and physicians & staff at the start of their shift.
- We ask that patients wear a protective mask (surgical or cloth) to their appointment and likewise all RAK physicians and staff will have masks on and other protective gear, as necessary. Protective masks should be worn properly covering nose and mouth to help minimize exposure.
- We ask patients to arrive 15 minutes before their appointment time to help us follow social distancing guidelines. If patients arrive earlier than 15 minutes, they will be asked to wait in their car until closer to the appointment.
- A Retina Associates representative will greet patients with a risk survey regarding COVID-19 symptoms, recent

- travel and will be checking patients' temperature.
- During this time, we have restricted entry to patients only. If patients require assistance, they should call our office (800) 627-2020 prior to their appointment to discuss their needs.
- As we resume care for our established patients, there will be increased demand for appointments. As we follow the social distancing guidelines we have fewer patient appointment openings. During this time, we are unable to guarantee patient appointments with a specific doctor in our office. We may change the time, date, location or doctor to accommodate appointments during this time.
- If patients are on a treatment plan, we ask that they keep their appointment,

as many of our patients need this treatment to preserve vision. We have and will continue following state and CDC Guidelines for their safety.

- Patients will receive an email or text message with a link to pre-register in the comfort of their own home, using their own device through our self check-in process (Phreesia).
- A Retina Associates representative will call all patients the day before their appointment with a risk survey regarding COVID-19 symptoms and recent travel.
- Patients will be asked to reschedule an appointment if they or a household member have been diagnosed with COVID-19, have a fever, have traveled internationally or on a cruise, or have had any other COVID-19 symptoms.

