



CASE STUDY: Mysterious Pigmentary Retinopathy

Submitted by **Blake A. Isernhagen, MD**

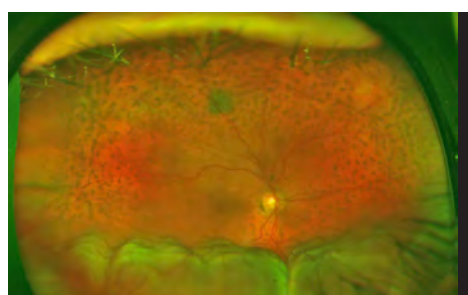


Figure 1

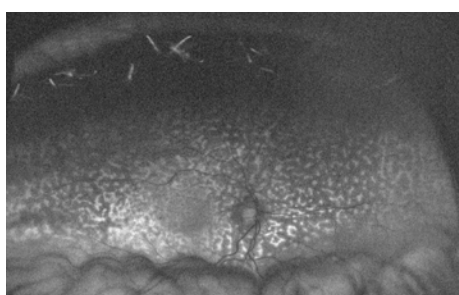


Figure 2

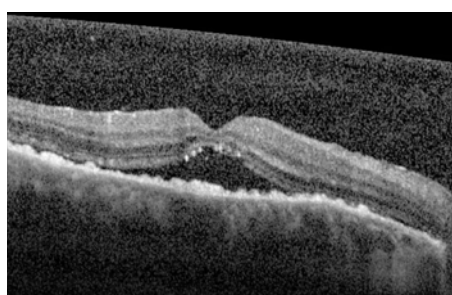


Figure 3

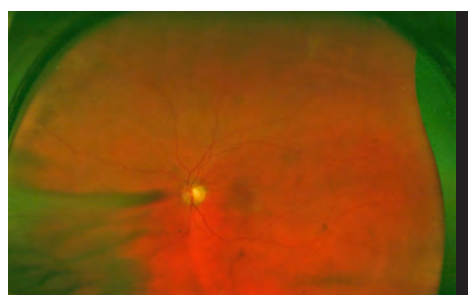


Figure 4

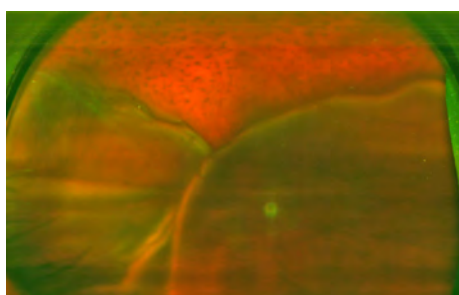


Figure 5

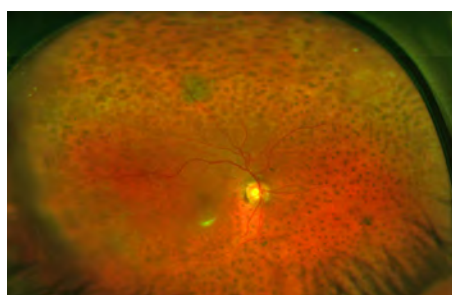


Figure 6

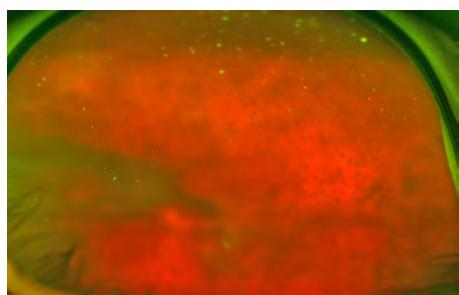


Figure 7

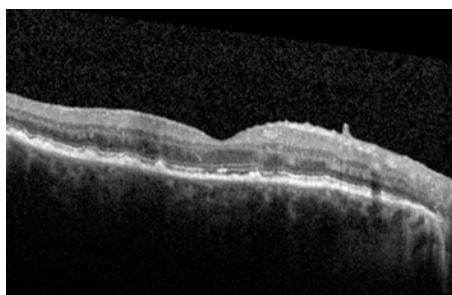


Figure 8

A healthy 74 year-old Caucasian female was referred for a retinal detachment with pigmented lesions in the right eye. Her visual acuity was 20/50 OD and 20/25 OS. The anterior segment exam was remarkable for a posterior chamber lens in the right eye and a mild cortical cataract in the left eye. There was no evidence of cellular inflammation in the anterior chamber of either eye. The right eye had numerous small ovoid pigmented lesions and an inferior serous retinal detachment (Figure 1). The fundus autofluorescence revealed deep changes to the retinal pigment epithelium (Figure 2) and the OCT showed thickening of the choroid and shallow sub-retinal fluid (Figure 3). The posterior segment of the left eye was unremarkable (Figure 4). The patient's diffuse pigmentary retinopathy associated with a retinal detachment was concerning for a metastatic or paraneoplastic process. Oncology was consulted and assisted in an extensive systemic work-up. No masses, tumors, or other neoplastic diseases were identified and the patient's ocular exam remained stable for the first month.

The following month she presented urgently for decreased vision in her left eye. Her visual acuity had declined to HM and she now had a mature cataract and a large serous retinal detachment (Figure 5 - also note the new pigmented lesions). The patient was diagnosed with Bilateral Diffuse

Uveal Melanocytic Proliferation (BDUMP) and oncology was consulted again to assist in the management of her disease. She received plasmapheresis and both eyes improved after treatment (Figures 6, 7, and 8).

The differential diagnosis of pigmentary retinopathy is quite diverse and largely depends on the actual appearance of the pigmentary changes or lesions. One of the more common conditions seen is retinitis pigmentosa which has "bone-spicule" pigmentary changes. In Kentucky we see many patients with histoplasmosis retinitis which have more discrete punched out appearing pigmented scars. Other causes include infections like rubella or syphilis. Some patients have multiple flat choroidal nevi but rarely more than 2-3 in each eye.

BDUMP is a rare disease but patients will present with characteristic findings on

multimodal imaging that assist in making the diagnosis. The pigmented lesions are diffuse and ovoid with notable reticular pattern of changes on fundus autofluorescence. In addition to the pigmentary changes, patients typically have a thickened choroid, serous retinal detachments, and rapid progression of cataracts. These changes are presumed to be secondary to proliferation of melanocytes from factors released/induced by the primary malignancy. The treatment of this paraneoplastic disease is targeted at first identifying and treating the underlying malignancy followed by plasmapheresis and/or local vs. systemic steroids. Unfortunately, many patients go on to develop irreversible vision loss but early identification of the primary malignancy can be life saving.

PHYSICIAN SPOTLIGHT



**Blake A.
Isernhagen, MD**

Training:

Undergraduate BS:
University of Oklahoma

Medical School MD:
Alpha Omega Alpha Honorary Medical Society University of Oklahoma College of Medicine

Residency:
The Dean A. McGee Eye Institute, University of Oklahoma College of Medicine

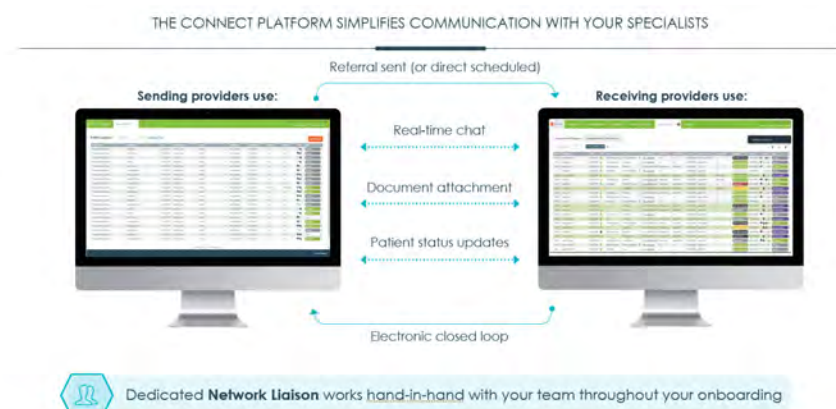
Fellowship:
Bascom Palmer Eye Institute, Uveitis and Retina
University of British Columbia, Vitreoretinal Surgery

Bio:
Blake A. Isernhagen, MD returned home in 2016 to Kentucky, where he grew up and went to high school. He received his undergraduate and medical degrees with Distinction from The University of Oklahoma, where he was recognized for academic excellence in the Alpha Omega Alpha Honorary Medical Society. Dr. Isernhagen did his Ophthalmology Residency at The Dean A. McGee Eye Institute at the University of Oklahoma and then moved on to an advanced Uveitis and Retinal training at the Bascom Palmer Eye Institute in Miami. He completed his fellowship in Vitreoretinal Surgery at the University of British Columbia, where he served as the distinguished William H. Ross Fellow. He has been active in lecturing, teaching, as well as researching uveitis and retinal disease. Dr. Isernhagen also has a passion for helping others and has served in overseas missions providing eye care and training in underserved areas, including China and Africa.

REFERRAL PLATFORM

Connect.
Powered by Phreesia

Retina Associates of Kentucky is now using an online referral request system, Connect. This platform allows our referral scheduling process to be streamlined and ensure all patients get the care they need. This online referral request system, from Phreesia, allows referring providers like your practice to send and track referrals electronically, and at no cost to you.



NOVEMBER 2021

Retina Associates of Kentucky Dr. John Kitchens First in the World to Implant Genentech’s SUSVIMO Following FDA Approval

On November 30th, 2021, John Kitchens, MD, from Retina Associates of Kentucky, was the first in the world to surgically implant FDA approved SUSVIMO at the Lexington Surgery Center in Lexington, Kentucky. For several years, the doctors at Retina Associates of Kentucky have been active in clinical trials for SUSVIMO, the first and only sustained release treatment for Wet Age-related Macular Degeneration (AMD). In October 2021 the FDA approved Genentech’s SUSVIMO for AMD, a common and potentially blinding eye disease that is currently treated with monthly injections. Since the approval date, there has been extensive coordination between the Lexington Surgery Center and Cardinal Health, their pharmaceutical distribution partner, to

allow for the first patient to potentially benefit from this new sight saving technique.

“This is a really big day for patients with wet age-related macular degeneration. Having an option for patients that can dramatically reduce the number of office visits and injections for patients and their families cannot be understated. It is truly a groundbreaking accomplishment that will change the way we treat people with this condition,” said Dr. John Kitchens.

AMD is a medical condition which may result in blurred or no vision in the center of the vision. It is the leading cause of blindness in people over the age of 60. Early in the disease in patients with “dry” AMD, there are often minimal symptoms.

If AMD advances, it becomes the more vision threatening “wet” AMD, which is called “wet” due to blood vessel growth and leakage. If the disease is discovered in its early stages, treatments can help prevent the vision loss from both dry and wet AMD. Patients with wet AMD are treated with frequent intraocular injections of Vascular Endothelial Growth Factor (VEGF) administered by a Retina Specialist in the office.

SUSVIMO (ranibizumab injection) is a prescription medicine used to treat adults with neovascular wet AMD twice-yearly vs. frequent-monthly injections. SUSVIMO is placed surgically into the eye by a Retina Specialist during an outpatient procedure, taking place in a surgical center. SUSVIMO releases medicine slowly into the eye providing continuous treatment. A good candidate is a patient who has responded to at least two injections of a VEGF inhibitor in the gel-like part of the eye. Patients should be monitored after the surgical implant in case any side effects emerge.

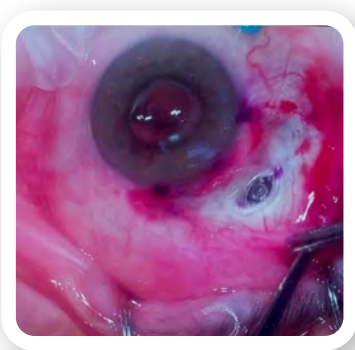
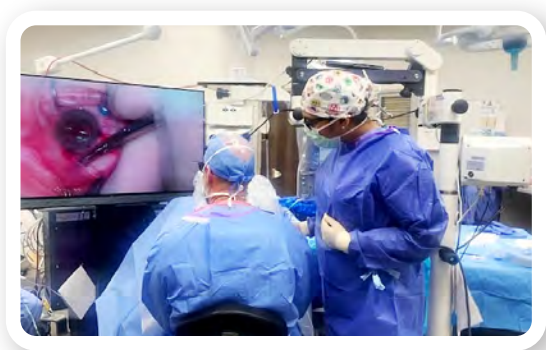
Retina Associates is proud to have been instrumental in this medical milestone, giving AMD patients a better quality of life with the hope and reassurance that



our physicians are on the forefront of vision preserving treatments.

Our physicians at Retina Associates of Kentucky are Board Certified in Ophthalmology and have completed a fellowship in vitreoretinal disease. Our doctors are listed among the “Best Doctors in America” and “America’s Top Ophthalmologists” and are internationally recognized for their expertise in diagnosing and treating retina disorders.

In addition, our physicians have over 40 years of experience in vitreoretinal surgery and perform more surgical procedures than any other practice in Kentucky. They regularly educate other physicians nationally and internationally on surgical procedures, and consistently bring the latest in surgical techniques and instrumentation to the operating room to improve our patients’ vision and quality of life.



SUSVIMO is an eye implant that reduces the number of treatments for Wet AMD patients

Your Retina Specialist will place SUSVIMO in your eye during an outpatient procedure in a surgical center

SUSVIMO slowly releases medicine into your eye, providing continuous treatment for 6 months

Every 6 months, your Retina Specialist will refill your implant with medicine during an in-office procedure



Actual size of the SUSVIMO implant

NEW OFFICE LOCATION

DECEMBER 2021

WINTER 2022 • Issue #23



Retina Associates proudly announces their new office location in

ELIZABETHTOWN

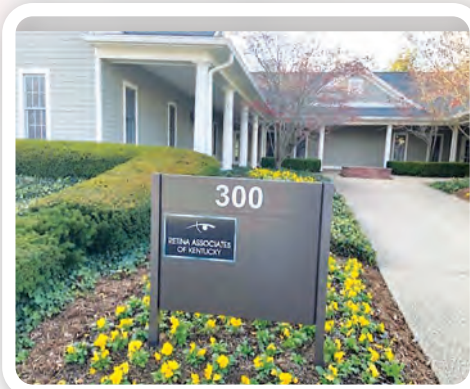
2935 Dolphin Drive, Building 300, Suite 302A
Elizabethtown, Kentucky 42701

Retina Associates of Kentucky is excited to announce that we have relocated our Bardstown office to Elizabethtown to better serve our growing population of Central and Western Kentucky patients. We will continue to service Bardstown and other surrounding area patients in Elizabethtown, Danville, Louisville and Somerset.

Our new office opened December 22, 2021, and is conveniently located off of 65, near the Kroger and directly across the street from the Post Office at 2935 Dolphin Drive, Building 300, Suite 302A.

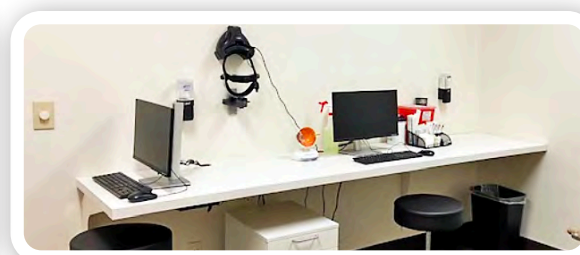
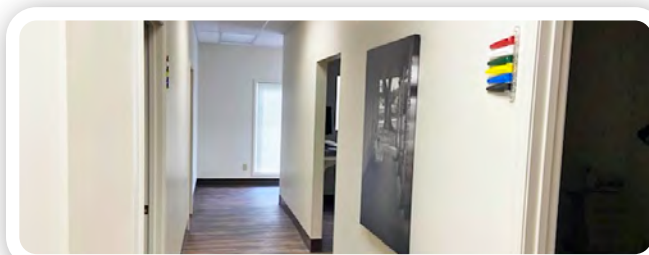
We look forward to becoming a part of the Elizabethtown community and welcoming patients in our new office.

For more information about the new Elizabethtown location or to schedule an appointment you may reach the Scheduling Department at (800) 627-2020.



Check out our NEW DANVILLE OFFICE

418 Whirl A Way Drive, Danville, Kentucky 40422



WHAT'S HAPPENING

DEC
22
2021

Elizabethtown
Office Opening

JAN
26
2022

CE Louisville
Malone's

SATELLITE LOCATION FREQUENCY

Danville: Mondays and Thursdays + Surgery at Central Kentucky Surgery Center downtown Danville

Elizabethtown:
Wednesdays

Frankfort:
Fridays and some
Wednesdays

Jeffersonville:
Mondays and
Thursdays

London:
Fridays and
some Mondays

Paintsville:
Wednesdays and
some Thursdays

Richmond:
Tuesdays

Somerset:
Tuesdays and
Thursdays

(800) 627-2020

Happy New Year TO YOU AND YOURS!



The mystery case presented in the prior issue is a classic example of Multiple Evanescent White Dot Syndrome (MEWDS) and demonstrates many of the characteristic features.

MYSTERY CASE REVEAL

Submitted by **Aaron M. Ricca, MD**

Typically, patients with MEWDS are young, healthy females in the second through 5th decade of life. They present with blurry vision or scotomata in one eye as the disease is primarily unilateral. Patients often report photopsias, as is common among many types of uveitis. Patients often report a viral/flu-like illness within weeks prior to the onset of ocular symptoms. MEWDS is under the umbrella category of “white dot syndromes” and the underlying pathogenesis is poorly understood, although some think it is viral in origin.

Clinical findings include numerous white spots throughout the macula and mid-peripheral retina on fundoscopic exam. Patients can occasionally have a mild vitritis and blurring of the optic disc margins. Short-wavelength autofluorescence clearly demonstrates the fundus lesions with areas of hyperfluorescence corresponding to the white spots on exam, as is shown in this case. Optical coherence tomography through the lesions demonstrates disruption and atrophy of the ellipsoid zone and can also demonstrate subretinal

hyperreflective material corresponding to the retinal lesions.

The prognosis is quite good with most patients regaining normal or near-normal levels of vision after 1 to 2 months duration of symptoms. The biggest risk factor for permanent vision loss is the development of a choroidal neovascular membrane, which can rarely occur. There are no therapies at this time that have been found to improve visual outcomes or hasten recovery. As the disease is self-limited, only observation is warranted and typically episodes are a one-time occurrence.

MAIN OFFICES

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

Louisville
6450 Dutchmans Parkway
Louisville, KY 40205

Ashland
1700 Winchester Avenue
Ashland, KY 41101

OUR OTHER LOCATIONS

Kentucky
Danville
Elizabethtown
Frankfort
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
Aaron M. Ricca, MD