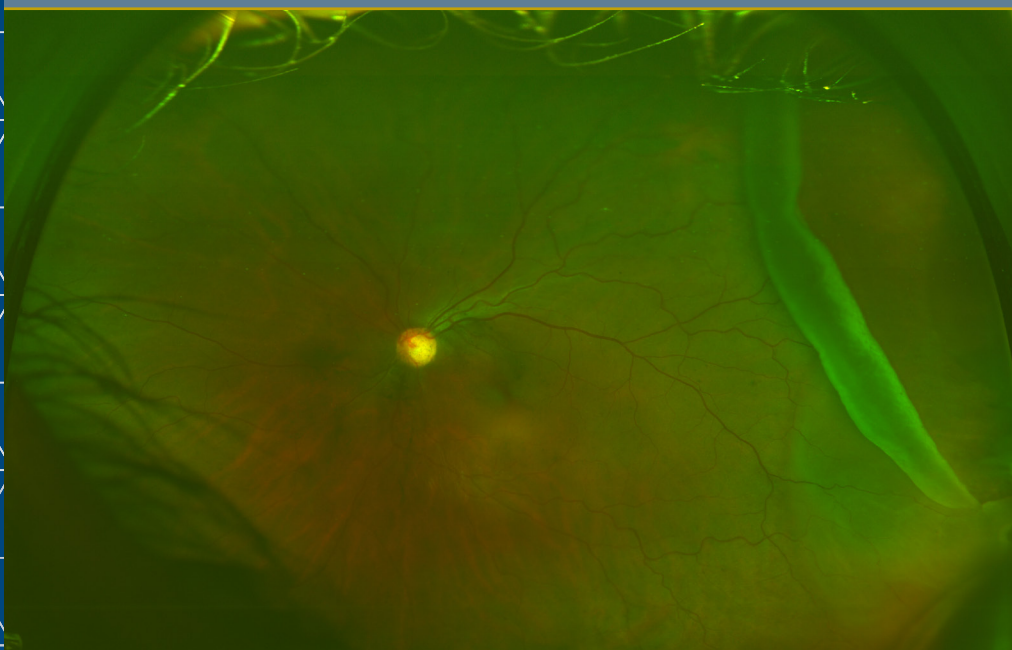


the

LIGHT PIPE

Editor-in-chief: Paul Walia, MD
Editor Emeritus: Robert A. Stoltz, MD, PhD

Summer 2018



IN THIS ISSUE:

| | |
|---|----------|
| Clinical Case Study | pg. 2-3 |
| Work Life Balance | pg. 4-5 |
| Update From Our Clinical Trials Section | pg. 6 |
| Imaging Corner | pg. 7 |
| Practice News | pg. 8 |
| Spotlight Feature: Dr. Scott Lampert | pg. 9-10 |

THE NEWSLETTER OF



GEORGIA RETINA

If Georgia Retina does not have your current email on file, please go to garetina.com/light-pipe-newsletter and fill out the form or call us at 404-255-9096.

A Case of Bilateral Choroidal Detachments

Sean Koh, MD

CASE:

A 65 year old white woman presented complaining of decreased peripheral vision in both eyes for 5 days. She did not endorse pain, flashes, floaters or any other concomitant ocular symptoms.

Ocular history is remarkable for cataract surgery in both eyes, approximately 18 months prior, and bilateral upper eyelid blepharoplasty, approximately one year prior. Her medical history is remarkable for hypertension, high cholesterol, and essential tremor. Her medications include Losartan, Hydrochlorothiazide, and Atorvastatin.

On examination, her visual acuities measured 20/30 with pinhole improvement to 20/20 in each eye. Pupils were round and reactive without afferent pupillary defect. Confrontation visual fields were mildly constricted temporally in each eye. Intraocular pressure was 15 in the right eye and 14 in the left eye. Anterior segment exam was within normal limits with deep anterior chambers and well centered multifocal intraocular lenses.

Posterior segment examination revealed a nasal choroidal detachment in each eye (Figure 1). B scan ultrasonography revealed a choroidal detachment without associated retinal detachment, intraocular mass or orbital compression

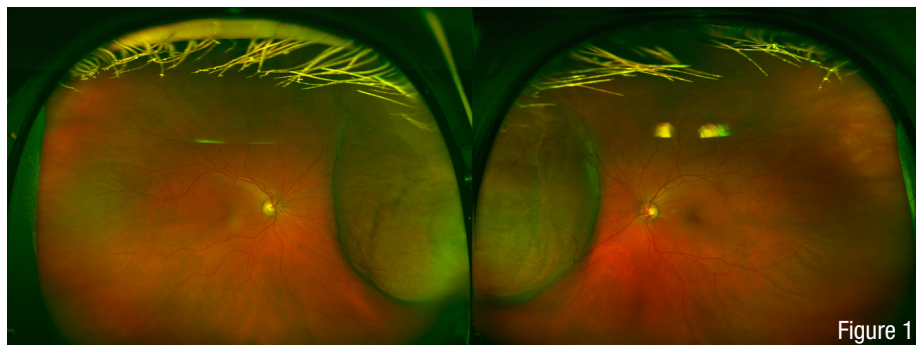


Figure 1

DIAGNOSIS:

Upon further questioning, she revealed that she recently started a new medication, Topiramate 25 mg BID, for treatment of essential tremor a few days prior to the onset of her symptoms. She discontinued the medication within a week due to visual symptoms after speaking with her neurologist.

Topiramate is a sulfa-derived anti-epileptic medication that is also used for other indications such as migraine, neuropathic pain, and essential tremor¹. Its pharmacodynamic profile results from modulation of voltage-gated sodium and calcium channels, increase of GABAergic inhibition, blockage of glutamate receptors and mild carbonic anhydrase inhibition². Several important ocular side effects of topiramate exist. The most common and well known is including

acute angle-closure glaucoma³. Other ocular side effects include induced myopia, diplopia, nystagmus, scleritis, oculogyric crisis, blepharospasm, suprachoroidal effusion, and periocular pain^{3,4}. Recently peripheral exudative retinal detachment and accumulation of submacular serous detachment have been noted with topiramate use⁶.

The pathophysiology is edema of the ciliary body with ciliochoroidal effusion which can lead to anterior displacement of the iris and anterior shift of the lens with narrowing of the anterior chamber. As a result, angle closure occurs⁵. Zonular relaxation can occur leading to thickening of the crystalline lens with resulting induced myopia. The ciliochoroidal effusion can also extend posteriorly causing choroidal detachment⁵.

This patient remained off of topiramate and was re-examined in one month. At the follow up visit, the choroidal detachments had resolved completely (Figure 2).

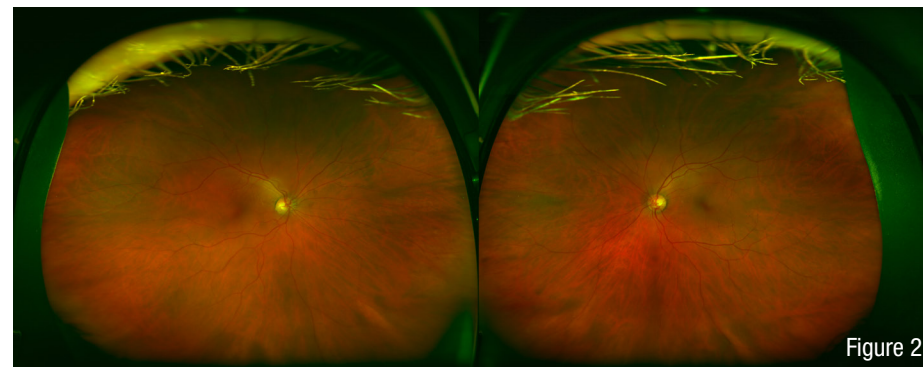


Figure 2

REFERENCES

1. Mirza N, Marson AG, Pirmohamed M. Effect of topiramate on acid-base balance: extent, mechanism and effects. *Br J Clin Pharmacol*. 2009;68:655-661.
2. Sadeghi R, Ondo WG. Pharmacological management of essential tremor. *Drugs*. 2010;70:2215-2228.
3. Langry H, Gills J, Davis R. Topiramate: A Review of its pharmacodynamic and pharmacokinetic properties and clinical efficacy in the management of epilepsy. *Drugs*. 1997; 54: 752.
4. Banta J, Hoffman K, Budenz D et al. Presumed topiramate-induced bilateral acute angle closure glaucoma. *Am J Ophthalmol*. 2001; 132: 112-4.
5. Rosenberg K, Maguire J, Benevento J. Topiramate-induced macular neurosensory retinal detachment. *Am J Ophthalmol Case Rep*. 2017; 7: 31-37.
6. Ikeda N, Ikeda T, Nagata M. Ciliochoroidal effusion syndrome induced by sulfa derivatives. *Arch Ophthalmol*. 2002; 120:1775

Work Life Balance

Jay Stallman, MD, FACS

As ophthalmologists or optometrists, we have professions which are generally very rewarding, and surveys indicate a high level of career satisfaction. Still, work can be all-consuming. After being in practice for a while it is common to look back and ask “where did all the years go?” Nobody looks back at their career and wishes they had worked more. It’s almost cliché to say that work/life balance is important. What energizes you and renews your enthusiasm? Some of us are more adventurous than others. I love SCUBA diving, traveling and skiing. But these are things most of us in Georgia can only do occasionally. What are you passionate about? What occupies your thoughts when you have a free minute? If someone asks you what you do outside of work, and you have to pause and think for a minute, you may not have found it yet.

Although I’m personally far from retirement, my older patients advise me that when it eventually comes around, it’s more fulfilling to have something to retire to, than only something to retire from. I find that pursuing some endeavor in depth gives me a greater sense of accomplishment and is more rewarding than casually dabbling in whatever activity happens to come along. As a group that has undergone extended education, we are good at delaying gratification, or at least to see that a higher level of gratification can be achieved if one is willing to devote extended time and effort. Some cultures support this as the norm. The Japanese, for example, think of the mastery of arts as taking decades. Your sushi chef has done a two year apprenticeship. Their flower arranging (ikebana) or tea ceremony have similar requirements.

I have devoted the last 30 years to training in the Japanese martial art of aikido and although I was recently promoted to 6th dan (6th degree black belt), and Shido-in (instructor), I often feel like a beginner. The more you delve into something the more nuances you can uncover. In the first 5-10 years of your study of anything, there are concepts that you are just not yet ready to process. But early on, as the saying goes, ‘you don’t know what you don’t know.’ As you become a devotee of any particular art, one of the side benefits you may discover is that there is a whole community of people striving to follow the same path. In the case of aikido, there is a worldwide network of people who travel to seminars and extend great hospitality to international visitors. I have been privileged to train in Hungary, Romania, Cuba, Peru, Canada and many cities in the US, developing friends and acquaintances around the world.

I’ve found a similar community of like minded people in one of my other major pursuits, which is building fine furniture. I participate in a group called the Society of American Period Furniture Makers (SAPFM.org). I’m one of the younger members and have been inspired by people who strive to create museum-quality work using the traditional hand tools and techniques of our forefathers from Colonial America. While I have been doing this for many years, and have taught seminars and published articles, I never fail to learn

from the presentations I attend, or to feel a sense of awe when viewing the work of real masters. There are always more skills to acquire, whether it be related to joinery, inlay, veneer work, turning, finishing or carving. This group also devotes effort to scholarly understanding of historical styles and influences and how they varied regionally. Time in the workshop often puts me into a state of “flow” where the hours slip by and I might forget to eat since I’m so engrossed. Any given furniture piece may take me 6 months to a year or more, but the side benefit is a something that may remain in the family for generations.

There is a long learning curve for most of my other interests such as fly fishing and tying flies, or photography. Any of these things could take a lifetime and the learning would never be complete. This depth makes any success much more satisfying. Some of my partners at Georgia Retina have similar avocations such as piloting an airplane (Dr. Vandeveldt), playing the saxophone (Drs Lampert and Rivelles), golf (Dr. Jacobson), artistic cake decoration (Dr. Stoltz), collecting and appreciating wine (Drs Lampert, Jacobson, Rivelles, Sharma and Walia).

So find something that is hard to do or might even seem impossible to do, and embark on the journey of exploration. Write a book. Learn a new language or a new sport. Devote yourself to a charitable organization, or start a new one. The possibilities are endless and it will add a new dimension to your life.



Study Update

Georgia Retina has a long tradition of commitment to and participation in clinical trials in order to provide our patients access to new, state-of-the-art preventative, or therapeutic treatments. We partner with the National Eye Institute, some of the nation's top pharmaceutical companies, and other clinical practices to explore the causes and cures for many retinal conditions.

We take special care to ensure that our study patients experience the best medical care possible. This past year we have been active in 10 clinical trials for wet age-related macular degeneration, geographic atrophy secondary to dry age-related macular degeneration, retinal vein occlusion, diabetic macular edema, and non-proliferative diabetic retinopathy.

We hope that as you consider where to refer your patients for retinal care, you will keep in mind that Georgia Retina not only provides exception care but can also offer your patients the opportunity to enroll in clinical trials thereby offering them new vision saving treatments. If you have any questions about whether your patient might be eligible to participate in one of our ongoing clinical trials, please call any one of our doctors or contact our research coordinator, Leslie Marcus (lmarcus@garetina.com).

Ongoing studies:

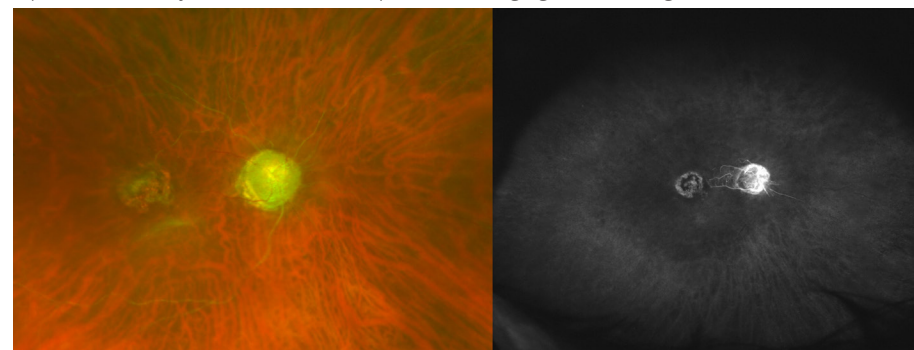
Ophthotech OPH2003: A Phase 2B Randomized, Double-Masked, Controlled Trial to Assess the Safety and Efficacy of Intravitreal Administration of Zimura® (Anti-C5 Aptamer) in Subjects With Geographic Atrophy Secondary to Dry Age-Related Macular Degeneration. Recruitment began in 2016 and is still enrolling. Dr. Sharma is the principle investigator.

Ora TLC399A2002: Indication: Macular Edema due to RVO. The protocol is to evaluate three different doses of ProDex (Dexamethasone sodium phosphate (DSP) with lyophilized lipid cake). Recruitment is active. Dr. Stoltz is the principle investigator.

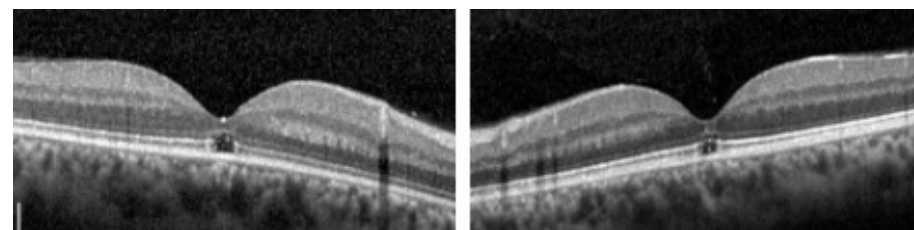
Genentech GR39821: A Phase I, Multicenter, Open-Label, Single-Dose, Dose-Escalation and Multiple – Dose Study of the Safety, Tolerability, Pharmacokinetics, and Immunogenicity of Intravitreal Injections of RO7171009 in Patients with Geographic Atrophy Secondary to Age-Related Macular Degeneration. Recruitment began in August 2017 and is still enrolling. Dr. Stoltz is the principle investigator.

KalVista KVD011-201:: A randomized sham-controlled double-masked Phase 2a study of the efficacy, safety and tolerability of the intravitreal plasma kallikrein inhibitor, KVD001, in subjects with center-involving diabetic macular edema (ciDME) who have had prior anti-vascular endothelial growth factor (VEGF) treatment. Recruitment began Spring 2017 and is still enrolling. Dr. Stoltz is the principle investigator.

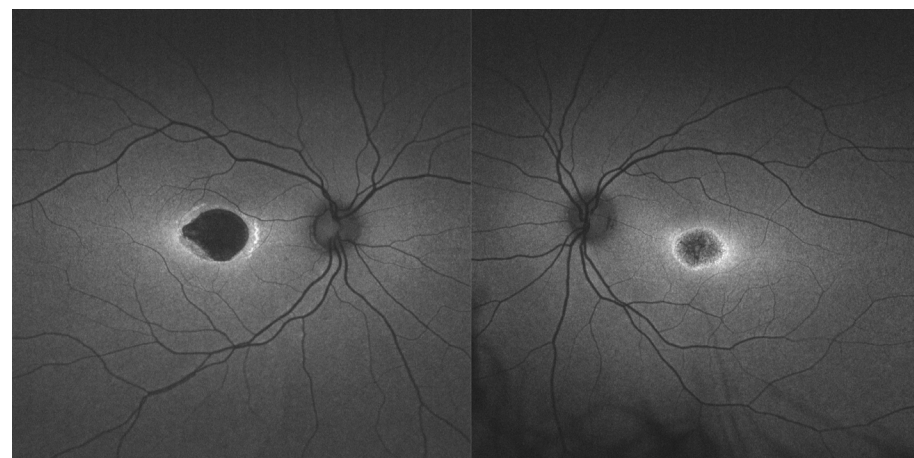
Ophthalmic Artery Occlusion- Fundus photo and angiogram showing loss of retinal vasculature



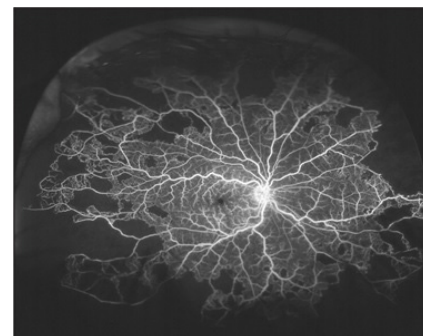
Sungazing during the Eclipse!- OCT showing focal outer macular holes



Bests Disease- Fundus Autofluorescence



Widefield fluorescein angiogram of extensive nonperfusion in a diabetic eye



Georgia Retina Welcomes a New Doctor!

Georgia Retina is excited to announce that Dr. Yogin Patel will be joining our practice in August 2018. He will be practicing primarily in the Conyers and Macon offices.

Dr. Patel was born and raised in the southeastern United States. His career in medicine began immediately after completing his education at the University of Georgia. He attended the Medical College of Georgia, where he was inducted into the Alpha Omega Alpha honor society. He completed a transitional year at UPMC Mercy Hospital in Pittsburgh, Pennsylvania, where he met his lovely wife. He then completed his residency at Henry Ford Hospital in Detroit, Michigan and served as Chief Resident in his final year of residency. Finally, he completed a two year vitreoretinal fellowship with the nationally recognized Cincinnati Eye Institute and University of Cincinnati in Cincinnati, Ohio.



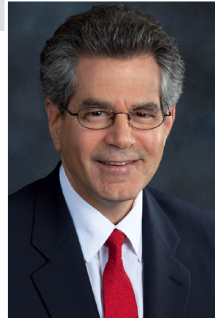
Dr. Patel chose a career in ophthalmology after a formative experience in high school, when he volunteered with a comprehensive ophthalmologist in his small hometown. Seeing his mentor enhance his patient's quality of life by improving their vision, while providing personal and compassionate care, inspired Dr. Patel to pursue a career in medicine and specifically ophthalmology. During his training the intellectual challenges of retinal pathology and the intricacies of vitreoretinal surgery provided a rewarding opportunity to positively affect the lives of others. Dr. Patel finds fulfillment and purpose in his work and in helping his patients.

Dr. Patel has authored multiple papers in peer reviewed journals and presented his research at national and international conferences. He has participated in basic science and clinical research. His clinical interests vary broadly and include retinal detachments, age-related macular degeneration, diabetic retinopathy, epiretinal membranes, retinal vein/artery occlusions, macular holes, and ocular inflammatory disorders.

Outside of medicine Dr. Patel is an avid fan of the Georgia Bulldogs and enjoys spending time with friends and family. He also loves cooking, traveling, and entertaining with his wife and growing family.

Spotlight with a Georgia Retina Doctor: Dr. Scott Lampert

This month we interview a founder of the practice, Dr. Scott Lampert. Dr. Lampert has been treating patients in the Atlanta area since 1980. He has served as a mentor to all the doctors in the group and we are all very fortunate he has shared his wisdom and clinical pearls with us. We asked him to sit down with us to share more of his words of wisdom.



LightPipe: What made you choose retina surgery?

Dr. Lampert: I wanted to do a retina fellowship after lots of exposure to surgical retina in my residency, but minimal exposure to the nascent area of medical retina in those days. I assumed that after my fellowship I would join a group practice and do general ophthalmology with some retina as necessary in the group. However, my best opportunity was to join Dr. Jack Davidson, who was looking for a newly trained associate. So, I went into full time practice in retina and vitreous. I shared the office with him, but had my own practice. As I became busier, I opened my own solo office. Then, Mike Jacobson and I decided to start Georgia Retina. You know how that turned out! So, like many life changing decisions, it sorta just evolved.

Lightpipe: What changes have impacted your practice the most over your practicing career?

Dr. Lampert: In terms of changes in retinal practice since I began, there are many important items. Certainly, the most important and most obvious is the advent of antiVEGF therapy. You cannot imagine the difference in my daily office routine, not only because of the volume of injections, but the conversations with patients. When the MPS study validated the use of laser for wet AMD, it still had extremely limited benefit for the majority of wet AMD patients. I spent lots of time telling patients they would never read or drive, but would not be blind. I would guess that about 2-4 % of wet AMD was successfully treated, if you look at visual results 3 or 4 years out! DME responded in a limited fashion to grid or focal laser. RVOs got limited benefits from laser and steroids.

Vitrectomy surgery has evolved wonderfully, but I must say that has been more incremental. Small gauge surgery, wide angle viewing, intraoperative laser, infusion control, heavy liquids, membrane staining, oil, high speed cutters, all have made us remarkably more efficient and predictable surgeons. GRTs, PVR, complex diabetic TRDs are still challenging, both in the OR and in terms of visual recovery, but certainly routinely repairable now.

Lightpipe: What changes do you think will affect the practice of retina over the next decade?

Dr. Lampert: My crystal ball tells me that the next wave of changes will be driven by genetics, stem cells, slow release of meds, certainly others.

Lightpipe: What are your hobbies outside of work?

Dr. Lampert: My hobbies are playing saxophone in a couple of bands, swimming, biking and hiking, traveling, grandchildren, eating well and enjoying good wine.

Lightpipe: You put it so casually but we understand you are an accomplished musician; can you tell us more about your band?

Dr. Lampert: [blushing] I play in the Sentimental Journey Orchestra, a 17 piece big band which plays jazz, swing and dance music from the 1940s to the present. We've played this year for Dancing Stars of Atlanta, among other gigs. There are some real pros in the band, and I love to hear them play solos. I also play in the Callanwolde Concert Band, a community symphonic ensemble. We play every July 4th on the square in Decatur, and 6 or 8 other concerts around the metro area.



Thank you for reading our Summer 2018 Light Pipe Newsletter!

If you have time, please take a moment to answer a few questions about this year's publication.

By doing so, you're helping Georgia Retina become an even better practice.

Click here to begin: <https://goo.gl/forms/BmhoogiNF9FczzMn1>

Our Physicians:

Michael S. Jacobson, M.D. | Scott I. Lampert, M.D. | Jay B. Stallman, M.D. | Mark J. Rivellesse, M.D. | Sean S. Koh, M.D. | Atul Sharma, M.D.
Robert A. Stoltz, M.D., Ph. D. | John J. Miller, M.D. | Stephanie L. Vanderveldt, M.D. | Hyung Cho, M.D. | S. Krishna Mukkamala, M.D.
David S. Chin Yee, M.D. | Harpreet "Paul" S. Wallia, M.D. | Yogini Patel M.D.



| | | |
|---|---|---|
| Cumming 960 Sanders Rd Suite 500 Cumming, GA 30041 Phone: 678-679-4830 | Macon 6055 Lakeside Commons Dr Suite 310 Macon, GA 31210 Phone: 478-238-9733 | Peachtree City 403 Westpark Ct Suite 110 Peachtree City, GA 30269 Phone: 770-486-5349 |
| Cartersville 100 Market Pl Boulevard Suite 304 Cartersville, GA 30121 Phone: 470-274-2030 | Douglasville 6095 Professional Pkwy Suite B-202 Douglasville, GA 30134 Phone: 678-303-0136 | Marietta 833 Campbell Hill St Suite 300 Marietta, GA 30060 Phone: 770-218-1888 |
| Stockbridge 175 Country Club Dr Bldg. 300, Suite D Stockbridge, GA 30281 Phone: 770-907-9400 | Conyers 2395 Wall St #280 Conyers, GA 30013 Phone: 678-374-7050 | Gwinnett (Lawrenceville) 575 Professional Dr Suite 330 Lawrenceville, GA 30046 Phone: 678-405-0922 |
| Northside (Atlanta) 1100 Johnson Ferry Rd NE Building 2, Suite 593 Sandy Springs, GA 30342 Phone: 404-255-9096 | Tucker 1462 Montreal Rd W Suite 412 Tucker, GA 30084 Phone: 404-299-5209 | |

Participating Insurance Plans:

- | | |
|-----------------------|--------------------------|
| Aetna U.S. Healthcare | Medical Resource Network |
| BCBS of Georgia | Medicare |
| Beech Street | Medicare Railroad |
| Blue Choice | Multiplan PPO |
| CCN PPO | National Preferred |
| Choice Care Network | Provider |
| Cigna | Network |
| Coventry Healthcare | Novanet |
| Evolutions Healthcare | Private HealthCare |
| System | Systems |
| First Health | Southcare PPO |
| Great-West | TriCare PPO, HMO |
| Humana | State Health |
| Medicaid | United Healthcare |
| -Peach State Medicaid | USA Managed Care |
| -Wellcare Medicaid | Organization |
| -Amerigroup Medicaid | WellCare Medicare HMO |

Other plans are pending; please call to check specific participation.

(678) 826-4620

Disclaimer: No contract, representations or promises are made, given or intended by any materials, information, and/or suggestions contained in this newsletter. The authors and publisher make no representations or warranties with respect to any treatment or action relied upon or followed by any person receiving information presented without warranty of any kind. In addition, neither our Practice nor any individual associated or affiliated with our Practice endorses or recommends any specific medical service, clinical study, medical treatment or commercial product. All text, copy, graphics, design, and other works are the copyrighted works of Georgia Retina, P.C. All rights reserved. Any redistribution or reproduction of any materials herein is strictly prohibited.