Treating Macular Degeneration

Compassionate, advanced care delivered in a professional setting are the key components to successful treatment of patients with the most serious eye conditions.

homas Adams requires sharp vision as he navigates the waters off Cocoa Beach as the captain of the charter fishing boat Miss Cape Canaveral.

"My eyesight is a key component in what I do," Thomas says. "I can't steer my ship, literally, without my eyes. One day, my vision started to blur and it went downhill very quickly. I was very concerned."



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Diagnosed with wet macular degeneration, Thomas credits retina specialist Gary J. Ganiban, MD, of The Eye Institute for Medicine & Surgery, with saving his vision.

"My primary doctor referred me to Dr. Ganiban many years ago, and I can tell you that I still have vision in both eyes only because of how hard Dr. Ganiban has fought to maintain it," recalls Thomas. "Over the years, Dr. Ganiban has placed numerous injections of special medications that have kept my macular degeneration from worsening."

Wet macular degeneration occurs when abnormal blood vessels form underneath the retina. These new blood vessels leak fluid or blood and blur central vision. Vision loss can be rapid and severe in the absence of aggressive therapy.

Stem cell research

"While stem cell research is still in its early stages, we have a great deal to be hopeful about going forward in treating wet macular degeneration," reports Dr. Ganiban, who completed a prestigious Fellowship in Medical and Surgical Treatment of Vitreoretinal diseases at Louisiana State University.

Dr. Ganiban and his partner, retina specialist Hetal D. Vaishnav, MD, were

among the first eye physicians to adopt the latest generation of medications, including Avastin, Lucentis, Eylea and Macugen, as well as various laser therapies to slow the progression of, and in some cases begin to reverse the effects of, macular degeneration.

"Both myself and Dr. Vaishnav are following the latest research and developments in stem cell research very closely," Dr. Ganiban explains. "Thus far, it appears that the implantation of stem cells in the eye is a safe procedure. The human body is not having an immune response that would lead to the rejection of these new cells. Patients involved in the trials have experienced new growth of retinal cells instead of progressively losing more cells, which is what would have happened in the absence of treatment. Patients are reporting enhanced peripheral vision.

"Prior to treatments, one study patient could only see hand motion. She could not read any letters on a standard eye chart. One month following stem cell treatment, she could read five letters. But this new ability to read letters does not fully explain how much improvement the patient perceived to have experienced. This same patient reported being able to discern colors more fully, to be able to read her wrist watch and even to begin to use her computer. This is truly remarkable," Dr. Ganiban adds.

Dr. Ganiban remains cautiously optimistic, stating that while these results are exciting, they are preliminary, and that more data needs to be studied before these therapies can be applied to a broader range of patients. He reports that these initial study patients are continuing to do well, which is very encouraging.

While stem cell therapy is not a "cure" for blindness that has already occurred, the hope is that through further research, scientists and physicians may be able to apply therapies that slow or halt the progression of the much more common dry form of macular degeneration. Should this become possible, early detection will be the key to maintaining vision and quality of life for affected patients.

Retinal detachment repairs

For Chuck Helmke, clear vision is particularly critical.

Chuck is the chief tactical firearms instructor at the American Police Hall of Fame, in Titusville.



"My eyesight is critical to my business and my passion, which is teaching people how to successfully defend themselves against criminals intent upon doing harm," reports Chuck.

Chuck suffered a retinal detachment, an eye condition that can lead to blindness in the absence of timely care, but fortunately his story has a happy ending. Chuck had a retinal detachment repair by Dr. Vaishnav at The Eye Institute for Medicine & Surgery.

"I knew that there was a problem before I got to the office because of the changes I experienced in my vision and I was concerned," Chuck says. "Soon after my eyes were dilated, Dr. Vaishnav was able to examine me, and he thoroughly explained the retinal detachment, as well as how he proposed to repair it. He was very confident and I felt comfortable with him right away. My surgery was a complete success and I am grateful for having my sight restored. I trust him with my eyes completely."

Dr. Ganiban is the lead clinical investigator for a research consortium currently developing enhancements to the retinal detachment repair process. The ultimate goal of their research is to improve quality of life for retinal detachment patients by decreasing recovery time following surgery. This leading-edge research is being conducted at the University of Central Florida and the Florida Institute of Technology.

Vitreo-macular traction

Dr. Ganiban and Dr. Vaishnav were among the first surgeons to begin using *Jetrea*, the latest treatment for early

macular holes, also known as vitreomacular traction.

"Whenever the macula, or the central part of the retina, is compromised in any way, patients may experience blurred or distorted vision. Until recently, surgery was the only viable treatment option once vision worsened past a certain point," explains Dr. Vaishnav. "With the introduction of Jetrea, we have a new, highly effective means of treating early macular holes without the need for surgery."

This was of great benefit to Carol Zarella, who was recently treated for an early macular hole by Dr. Ganiban.

"I was nervous about having the treatment at first, but it was a total success," relays Carol. "I see much better and the wavy lines are gone. Dr. Ganiban was wonderful and I can't say enough about the staff at The Eye Institute for Medicine and Surgery."

"Patient satisfaction and achieving the best possible outcomes are our top priority," adds Dr. Ganiban.

"It's really exciting when a patient tells me that, for the first time in years, they perceive that they are seeing better," Dr. Ganiban explains. "Every patient we see is someone's husband, wife, mom, dad, friend or grandparent. Dr. Vaishnav and I never lose sight of this. We treat each of our patients individually and strive to provide exceptional care." **FHCN**–Judy Wade



Comprehensive eye evaluations

When it comes to your eyesight, only the best will do. To schedule a comprehensive eye examination with one of the specialists at The Eye Institute for Medicine & Surgery, please call (321) 722-4443. They have three offices – Melbourne, Rockledge and Palm Bay.



Hetal D.Vaishnav, MD, is board certified by the American Board of Ophthalmology. He is a graduate of Morehouse Medical School in Atlanta. He served his residency in ophthalmology, as well as a fellowship in retina and vitreous diseases and surgery, at the University of Florida. Dr. Vaishnav serves as an adjunct clinical instructor of ophthalmology and a research scientist at the University of Florida. He is a specialist in diagnosing and treating all retinal disorders including macular degeneration, diabetic eye diseases, retinal holes, tears and detachments, and various other retinal disorders. Dr. Vaishnav is a member of the American Society of Retina Specialists and he is a clinical investigator for the Diabetic Retinopathy Clinical Research Network.

Gary J. Ganiban, MD, is board certified by the American Board of Ophthalmology. He received his undergraduate degree in biology from Bucknell University. He attended the Hahnemann University Medical School in Philadelphia. He served his medical internship at the University of Arizona in Tucson and his ophthalmology residency at the Friedenwald Eye Institute at Maryland General Hospital in Baltimore, where he served as chief resident. Dr. Ganiban pursued advanced fellowship training in diseases and surgery of the retina and vitreous at Louisiana State University. He is a member of the Sigma Xi National Research Society and the American Society of Retina Specialists. Dr. Ganiban is a fellow of the American Academy of Ophthalmology and the New Orleans Academy of Ophthalmology.