

New Advances in Eye Surgery

Treatment for pterygia, glaucoma and cataracts offers new hope for ophthalmology patients.



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Apterygium, also known as *surfers' eye*, is a growth that invades the cornea, causing significant foreign body sensation that frequently interferes with vision. Pterygia are a frustrating condition for people who suffer from them.

"People ages twenty to fifty, who spend a good deal of time in the sun, who do not wear sunglasses or brimmed hats on a regular basis, who have light complexions and light colored eyes, tend to develop pterygia more frequently than others," according to ophthalmologist and fellowship-trained cornea and glaucoma specialist, Jason K. Darlington, MD.

In the past, pterygia were surgically removed from the cornea, and the affected area was surgically closed with sutures often times with donor corneal graft tissue placed over the surgical site.

"With a traditional surgical approach, the pterygium would recur approximately seventy percent of the time," explains Dr. Darlington.

"My approach involves utilizing the latest techniques in cornea surgery, whereby I use autologous stem cell transfer – using actual stem cells gathered from my patient's eye – to help the cornea heal safely and quickly following removal of the pterygium," reports Dr. Darlington, who completed his fellowship under Dr. Thomas Samuelson and Dr. Richard Lindstrom at the prestigious Phillips Eye Institute in Minneapolis, Minnesota.



"One of the most noteworthy benefits of this approach to pterygium management is that the associated rate of recurrence declines markedly to only approximately four percent," explains Dr. Darlington, chief of the cornea service at The Eye Institute for Medicine & Surgery.

"Irritating, uncomfortable and unsightly are adjectives that are commonly used by patients to describe their perception of having a pterygium," he states. "It is my great pleasure to help relieve the discomfort people associate with having a pterygium. The fact that the vast majority of patients

who undergo this procedure under my care do not have their pterygia regrow is a wonderful benefit both to the patient and to the health care system."

Help for glaucoma

A dramatic shift is starting to transform the practice of glaucoma surgery. While traditional surgical procedures, such as trabeculectomy, are demonstrating steady, evolutionary improvements, two new types of glaucoma surgery are moving interventional care from a last resort to front-line therapy.

The first procedure, known as the TRAB360, involves the use of a trabeculotome, a non-powered instrument intended for the manual cutting of up to 360 degrees of internal tissue known as the trabecular meshwork, in a procedure called a trabeculotomy.

The second procedure, known as the VISCO360, involves the use of the VISCO360 Viscosurgical System to facilitate the delivery of small, controlled volumes of viscoelastic fluid through a custom access cannula-

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New Advances in Eye Surgery: Continued

la as part of the procedure. With the removal of the trabecular meshwork, a significant lowering of eye pressure is frequently achieved, according to Dr. Darlington.

"The instrument and procedure have been used both as a standalone and combined with cataract surgery. It can be performed in eyes that have had cataract surgery and those that have not," explains Dr. Darlington. "My colleague, Dr. James McManus and I seek to help ensure that every one of our glaucoma patients maintains his or her vision. We keep abreast of and participate in the latest clinical and surgical research in ophthalmology to ensure that residents of the Space Coast have access to leading-edge technology and treatments for multiple eye conditions, including the many forms of glaucoma. The bottom line is we do not want glaucoma to cost anyone their precious eyesight or independence."

Leading-edge cataract surgery

"Dr. McManus, when is it time for me to have cataract surgery?" This is a question that patients ask me and my colleague, Dr. Jason Darlington, every day," says cataract specialist James N. McManus, MD, of The Eye Institute for Medicine & Surgery. "The answer is, When your vision no longer allows you to participate in your daily activities with good eyesight and spectacle correction cannot provide adequate improvement, it is usually time to consider cataract surgery."

Cataract surgery has advanced tremendously during the last decade, according to Dr. McManus. Incisions are smaller, vision is restored much more rapidly and there are a great number of lens implant options to help people optimize their vision following surgery, states Dr. McManus, who was one of the founders of The Eye Institute.

Years ago, cataract surgery was about removing a dense cataract and optimizing a patient's eyeglass prescription following surgery to maximize vision. Cataract sur-

gery in 2015 is quite different, explains Dr. McManus.

"In 2015, patients are much more educated as to their options and the possibilities of what can be accomplished in terms of enhancing their quality of life. People are aware that some people are candidates for having high-technology lens implants placed during cataract surgery that can reduce, and in some cases eliminate, astigmatism, provide vision at distance, near and intermediate ranges without the need for spectacle correction, and/or have accommodative lenses placed that enhance intermediate vision, and in certain cases do so while correcting astigmatism," reports Dr. McManus.

"Patients approach the process with a sense of purpose and excitement, eager to learn if they are good candidates for these high-technology lenses," he adds. "For many people, receiving these lens implants creates a quality of vision that they may not have experienced in thirty or forty years. For such people, it is like turning back the hands of time."

"Some patients see a tremendous benefit to eliminating or minimizing dependence on spectacles or contact lenses for sports, driving, reading, computer use, vocational activities or casual and family time," continues Dr. McManus. "Other physicians in the community are coming to us seeking these procedures for themselves."

"Some of our patients feel burdened by the expense and need to place glaucoma medications in their eyes every day. In many cases, the need for glaucoma medications can be reduced or eliminated by placing an iStent at the time of cataract surgery," according to Dr. Darlington. "Many of our patients look forward to their cataract surgery, not only as a once-in-a-lifetime opportunity to enhance their vision, but also as a way to relieve some of the ongoing burden of managing their glaucoma."

"It is the mission of The Eye Institute to remain at the forefront in technology and

medical and surgical eye care, to ensure that our patients have access to the latest advances and treatments as soon as possible," reports Eye Institute CEO, Jerry Orloff. "We are blessed with a medical staff who share a united vision of what constitutes outstanding patient care built upon kindness, compassion and evidence-based medicine. Not a day goes by where we are not sharing thoughts about how to enhance the outcomes and lives of our patients."

"It is quite inspiring to work with a group of visionaries and to have a staff who sincerely care about the well-being of all whom we serve."



COMPREHENSIVE EYE CARE & EYE SURGERY

The mission of The Eye Institute for Medicine & Surgery is to bring the most current medical and surgical advances in eye care to the residents of the Space Coast, and to deliver these services in a warm and friendly setting.

For a consultation with Dr. Darlington, Dr. McManus, or any of the eye care subspecialists at The Eye Institute, please call **(321) 722-4443**.

There are three offices to serve you:

1995 W. NASA Blvd. * Melbourne, FL 32904

150 S. Woods Dr. * Rockledge, FL 32955

5055 Babcock St. NE * Palm Bay, FL 32905

To schedule an appointment with one of the eye specialists at The Eye Institute for Medicine & Surgery,

please call **(321) 722-4443** or visit www.SeeBetterBrevard.com

Appointments are available in the Rockledge, Melbourne and Palm Bay offices.