# FAST Action Saves Sight

Retinal Detachments: What you don't know could cost you your vision.



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very year, nearly 25,000 people in the United States experience retinal detachments, a true medical emergency that can threaten their sight. For some, symptoms begin gradually and may be barely noticeable. Others will experience a sudden and dramatic decrease in their vision, creating an obvious urgency to seek care.

"There is no question that a retinal detachment left untreated can lead to vision loss that can become permanent in the absence of timely and expert care," states Gary J. Ganiban, MD, chief of vitreoretinal surgery at The Eye Institute for Medicine & Surgery.

The *retina* is a thin, interior layer of tissue at the back of the eye. Its job is to process light through special cells called *photoreceptors* that detect

## RETINAL DETACHMENT Warning Signs

If you experience the following symptoms in your field of vision, seek medical care quickly:

- \* Flashing lights
- \* Increase in floaters
- \* What look like flies, cobwebs, strings, strands or other strange objects
- \* Missing areas of vision despite looking in different directions
- \* What seems like a curtain coming down over the eyesight

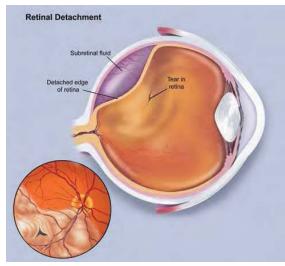
qualities such as color and light-intensity. That information is sent through the optic nerve from the retina to the brain, which creates the images we see.

Retinal detachment occurs when the retina pulls away from its normal position and is cut off from nourishing blood vessels. The interior of the retina also can be harmed by the

appearance of tears or holes, conditions that may progress when left untreated.

Dr. Ganiban emphasizes that whether the retina is affected by a small tear or full detachment, the injury can occur suddenly and without warning. "There is no pain or redness of the eye associated with these conditions," notes the doctor.

"However, in many cases, there are warning signs, and these signs should not be ignored," adds Dr. Ganiban. Patients with retinal detachments may experience sudden changes in their field of vision. They may notice an increased number of tiny specks called *floaters*, which may seem like moving cobwebs, strings or strands. Some have described what looks like a curtain coming down



A tear or hole in the retina can allow \( \)uid to enter and weaken the retina's attachment. When this happens, the retina can't compose a clear picture from incoming light and vision becomes blurred and dim.

over a portion of their vision.

These symptoms can occur before the retina fully detaches, explains Hetal D. Vaishnav, MD, director of clinical research and preventive medicine at The Eye Institute for Medicine & Surgery.

This is when time will be critical.

"If a patient or referring doctor suspects a retinal detachment, a key to heling ensure that vision is maintained or regained is to schedule an examination with a retinal specialist as soon as possible," advises Dr. Vaishnav.

"The bottom line is that in many cases, a thorough, dilated eye examination will reveal the retinal hole or tear prior to it developing into a full detachment.

"Then a procedure can be performed through a laser or freezing probe to seal the tear and help prevent any further separation of the retina," assures Dr. Vaishnav.

#### Fast Action Saves Sight: Continued

#### Gentler repair procedure

A trend in retinal surgery to repair retinal detachments has been to move away from a treatment known as scleral buckle and toward a procedure called vitrectomy. A scleral buckle involves placement of a tiny device on the eye's outer surface that helps close the retinal break. Vitrectomy removes most of the vitreous, the clear, gel-like substance inside the eye.

Vitrectomy offers numerous advantages for most patients who

### RETINAL DETACHMENT Risk Factors

- \* Over age 40
- \* Previous retinal detachment in one eye
- \* Family history of retinal detachment
- \* Extreme nearsightedness
- \* History of eye surgery, including cataract removal
- \* Previous severe eye injury or trauma
- \* Diagnosis of other eye diseases or disorders

need surgery for retinal detachment, says Dr. Ganiban. One is that removing the vitreous reduces traction on the repaired retinal tear. This makes future retinal tears less likely.

The vitrectomy procedure frequently takes less time than other methods, which often means the risk of complications is reduced, he adds.

"Vitrectomy surgeries heal relatively rapidly due to minimal surgical trauma," states Dr.

Ganiban. "Very little cutting is required, and frequently stitches aren't required. Compared to a scleral buckle, vitrectomy is very gentle.

"Another advantage of vitrectomy is that the shape of the eye isn't altered and therefore there shouldn't be a change in the patient's eyeglass prescription. With a scleral buckle, the eye may become elongated, causing induced myopia, which is nearsightedness, and/or a visually significant astigmatism."

#### The Ganihand for better view

A medical innovation developed on the Space Coast by Dr. Ganiban is now aiding eye surgeons during vitrectomy procedures. The surgeon's view of the back of the eve and affected structures is critical during retinal repairs. Traditionally, this enhanced view is achieved with the help of a surgical technician. The technician applies slight pressure to the sclera, the eye's outer, white surface, with a cotton tip applicator or scleral depressor made of stainless steel. The surgeon can then see the back of the eye through the patient's well-dilated

This method is decades-old but can be cumbersome and inefficient. In most cases, it increases the length of the surgery.

Dr. Ganiban knew there had to be a better way and designed a handsfree scleral depressor device. During surgery, the instrument is secured to the speculum that keeps the patient's eye propped open. It features a custom light pipe to ensure the surgeon has an ideal view of the interior eye without the need for a surgical assistant.

There are now multiple versions and sizes of the Ganihand in development to ensure the device will be suitable for all related surgical applications. "It is my sincere hope that my new instrument will help surgeons all over the United States and the world to improve their surgical outcomes, minimize complications and restore vision that otherwise may not have been regained," says Dr. Ganiban.



#### 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. There are three offices to serve you: 1995 W. NASA Blvd. in Melbourne, 150 S. Woods Drive in Rockledge and 5055 Babcock Street NE in Palm Bay.