

# Macular Hole

## **What is it?**

Your doctor has discovered you have a macular hole. This means that the center part of your retina called the macula has developed a defect where the retinal tissue is stretched open. Because this tissue is responsible for our straight ahead or focused vision, this defect causes a gray or black spot in the center of vision at the focusing point. The surrounding vision is usually quite normal, creating a “donut” effect with a ring of normal vision and a hole in the middle. The vision is almost never completely lost by this problem. Occasionally, the “hole in the donut” is noted to get larger, but generally, this is not a severe progression, and the peripheral vision is maintained.

## **How is it Caused?**

Although we do not know exactly why a macular hole develops in a given individual, it results from traction of the vitreous gel pulling on the center of the macula just enough to create a hole in this area. Unlike tears in the side or periphery of the retina, a retinal detachment does not typically follow the development of a macular hole.

## **Could this Happen to Both Eyes?**

There is a small risk that a macular hole could develop in your other eye. The risk may be as high as 10 or 15%. There may be findings on your examination which allow us to identify a relatively higher or lower risk for you. The strain of the first eye being abnormal does not cause the other eye to develop this problem.

## **What Kind of Treatment?**

The only effective treatment is surgery. The operation is called a vitrectomy and consists of removing the vitreous gel that created the hole in the first place. In order to seal the hole closed, your doctor will replace the gel with a temporary gas bubble at the time of surgery. This bubble will block the vision in the operated eye for a period of a few weeks depending upon the type of gas bubble used. The body eventually absorbs this gas bubble and replaces it with natural eye fluids.

The surgery is usually performed under local anesthesia. There is usually very little discomfort postoperatively. Eye drops are used for a few weeks after the surgery to facilitate healing.

## **How Effective is Surgery?**

Surgery is effective in closing the hole in 90% or more cases. Occasionally, a hole doesn't close or reopens later after the first operation. In such cases, additional surgery may be effective. Surgical success may be enhanced if you can position in a face-down manner immediately after the operation and maintain this positioning for 5-7 days. This position may be assumed while lying, sitting, or standing. You can bathe, eat, and tend to your needs, but the likelihood of a good result is improved if this position can be maintained at all other times. We can provide you with some useful tips for maintaining this positioning as comfortably as possible.

The amount of vision that can be recovered with successful surgery is difficult to predict. Most people will have some degree of noticeable visual improvement, but the improvement is usually gradual (weeks to months). It is relatively common to have cataract development or progression months after surgery. Patients who elect to have surgery for a macular hole should be aware that cataract surgery may be indicated at some point in the future. Complications of macular hole surgery such as retinal detachment, infection, hemorrhage, and others are very infrequent, although when they occur, they can affect the vision and sometimes additional surgery may be needed.

*If you have any additional questions or concerns, please ask the doctor or a member of the staff.*