

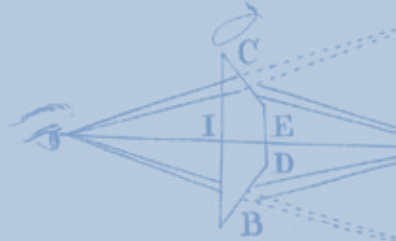
Macular Hole



Fig. 10.



Fig. 11.



RETINA
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PRESERVING

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Retina Specialty Institute is the premier retinal practice in the Southeast. Our physicians fight for the amazing gift of sight every day through clinical research and practical treatment. The Institute offers state-of-the-art clinical and surgical procedures for patients suffering from eye diseases such as:

- Macular Degeneration
- Diabetic Retinopathy
- Retinal Tears, Holes and Detachments
- Epiretinal Membrane (Macular Pucker)
- Arterial and Venous Occlusions
- Complications of Cataract Surgery
- Uveitis (Inflammation in the Eye)
- Ocular Tumors
- Inherited Retinal Diseases
- Severe Eye Trauma
- Optic Nerve Disorders

Our surgeons, located throughout the Gulf Coast and Southern Alabama, are a group of world-class retina specialists who have earned an international reputation as leading retina researchers, disciplined clinical experts and caring, compassionate healers. Experience visionary retina care.





What You're About to Read

1. *About Macular Holes*
2. *Treatment*
3. *Causes*
4. *Symptoms*
5. *Testing & Diagnosis*

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What is a Macular Hole?

The retina is the light-sensing layer of tissue that lines the inside back portion of the eye. If you think of the eye as a camera, the retina is the “film in the camera” which relays the image to the brain.

A specialized area of the retina found in the center, called the macula, is responsible for clear, detailed vision.

For the patient to read and drive, the macula must be functioning well. A macular hole is an abnormal opening that forms at the center of the macula over a period of several weeks to months. This results in loss of central vision.



How is a Macular Hole Treated?

Vitreotomy surgery is the only treatment that can repair a macular hole and possibly improve vision. Macular hole surgery can close a macular hole more than 90 percent of the time with one surgery. The amount of visual recovery is dependent on the amount of time a macular hole has been present. Best visual results are attained if the hole has been present less than six months.

During vitrectomy surgery, your retina specialist uses delicate instruments inside the eye to remove the vitreous gel and the tangential forces which are pulling on the macula. The eye is then filled with a gas bubble which will slowly dissolve.

After surgery, the patient must maintain a constant face-down position for up to one week to keep the gas bubble in contact with the macula and close the macular hole. A successful visual result often depends on how well this position is maintained.



When the macular hole closes, the eye slowly regains part of the lost sight. Vision usually does not return all the way to normal.

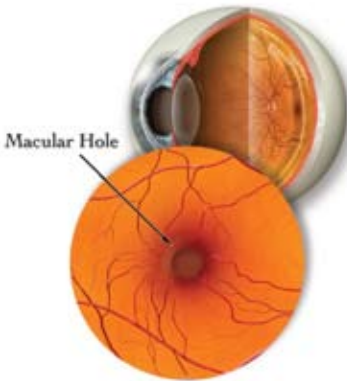
Some of the risks of vitrectomy surgery include:

- *Infection*
- *Bleeding*
- *Retinal Detachment*
- *High pressure in the eye*
- *Some loss of side vision*
- *Accelerated cataract formation*

Patients cannot fly in an airplane or travel up in high altitudes until the gas bubble is gone. A rapid increase in altitude can cause a dangerous rise in eye pressure.

Your retina specialist, surgeon or staff member can answer any questions you may have concerning macular holes, their diagnosis and treatment.

What Causes a Macular Hole?



The majority of macular holes occur in the fifth or sixth decade or later. They are more commonly found in women. Macular holes form due to an abnormal interaction between the vitreous (the “jelly-like” substance that fills the inside of the eye) and the macula.

During normal aging, the vitreous separates from the macula. In some patients, abnormal forces form tangentially along the retina to tear the potential macular hole in the center of the vision.

There are different stages of macular hole formation which are progressive in nature. Some early macular holes may regress, release the vitreo-macular traction and close the macular hole. Completely open macular holes usually require intervention.

Less common causes of macular holes include injury and long term swelling of the macula. Macular holes due to trauma may improve with observation after macular swelling has resolved. Visual potential after closure of these types of macular holes is guarded.



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What are the Symptoms?

In the early stages of macular hole formation, vision first becomes blurred and/or distorted. If the hole progresses and opens completely, a blind spot develops in the central vision, similar to the picture you would get if your camera film had a hole in it.

Side or peripheral vision remains normal, and there is no pain. It is uncommon for a macular hole to occur in both eyes, although this can occur.

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What Testing Might Be Done?

Your doctor can usually diagnose a macular hole by looking inside your eye with special instruments.

Other specialized testing such as optical coherence tomography (OCT) or fluorescein angiogram (FA) may be done to aid in diagnosis and determine the extent of the damage to the macula.



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