



Macular Hole

Just as the name indicates, a macular hole is a hole in the central part of the retina, called the macula. Because the macula is the most sensitive part of the retina and is responsible for the eye's sharp central vision, a macular hole can cause moderate to severe vision loss, depending on the size of the hole and how long it has been present. Macular holes are painless.

A macular hole can occur at any age as a result of a sudden impact to the eye. More commonly, however, it occurs in middle age and older ages as a result of abnormal adherence, or stickiness, between the vitreous jelly and the center of the macula. The abnormally sticky vitreous continuously pulls on the center of the macula, gradually causing the formation of a hole in the thin center portion of the macula.

The treatment for a macular hole is vitrectomy surgery with removal of the sticky vitreous jelly along with peeling of any scar tissue or membranes that may be keeping the hole open. The eye is then filled with a large gas bubble. The purpose of the gas bubble is to keep pressure on the hole and keep the hole sealed so that it can close back up. Because gas floats upward due to buoyancy (like the gas bubbles in a carbonated beverage) and because the macular hole is located on the back of the eye (where the macula is located), after the surgery, your doctor may require that you keep your head down, facing the floor, for a few days to a week. This allows the gas bubble to cover the hole and is important for the surgery to be a success. The gas bubble gradually dissolves over a few weeks to a month and finally disappears.

