

Macular Hole

The macula is the part of the retina responsible for acute central vision, the vision one uses for reading, watching television, and recognizing faces. A macular hole is a small round opening in the macula. The hole causes a blind spot or blurred area directly in the center of your vision.

Most macular holes occur in the elderly. When the vitreous (the gel-like substance inside the eye) ages and shrinks, it can pull on the thin tissue of the macula, causing a tear that can eventually form a small hole. Sometimes injury or long-term swelling can cause a macular hole. No specific medical problem is known to cause macular holes.

Vitrectomy surgery, the only treatment for a macular hole, removes the vitreous gel and scar tissue pulling on the macula and keeping the hole open. The eye is then filled with a special air bubble to push against the macula and close the hole. The air bubble will gradually dissolve, but the patient must maintain a face down position for one to two weeks to keep the gas bubble in contact with the macula. Success of the surgery often depends on how well the position is maintained.

With treatment, most macular holes shrink and some of the lost central vision slowly returns. The amount of visual improvement typically depends on the length of time the hole was present. Some people with normal vision in the other eye may not want surgery, since vitrectomy surgery cannot completely restore vision.