

MACULAR HOLE

What is a macular hole?

The retina is the thin light-sensitive layer of tissue that lines the back of the eye; it relays the images that you see to the brain. The central area of the retina, called the macula, is responsible for clear, detailed central vision. A macular hole is an abnormal opening that forms in/at the macula.

What are the symptoms of a macular hole?

In the early stages, vision becomes blurred and distorted. If the hole progresses, a blind spot develops in the central vision, while the side (peripheral) vision is normal.

What causes a macular hole?

Most macular holes are related to aging of the tissues in the eye. The vitreous gel within the eye pulls on the thin tissue of the macula until it tears. The torn area gradually enlarges to form a round hole. Less common causes include injury and long-term swelling of the macula.

How is a macular hole diagnosed?

The ophthalmologist diagnoses this condition by looking inside the eye. Special tests such as *ocular coherence tomography (OCT) scans* may also be performed to confirm the diagnosis.

How is a macular hole treated?

Unfortunately neither medication nor laser therapy is useful in the treatment of a macular hole. Low vision devices may help patients manage their daily activities, especially if central vision is damaged in both eyes. The only surgical option is an operation called a **vitrectomy**, where the surgeon removes the vitreous gel that is pulling on the macula and peels a thin layer/membrane that may be present on the surface of the retina. The eye is then filled with a special gas bubble that will slowly dissolve. After surgery, the patient must lie face down as much as possible for a few days to keep the gas bubble in contact with the macula. Surgery is usually successful in closing the macular hole. Central vision usually improves slowly after macular hole surgery, even up to a year after the operation. The earlier the surgery is done, the better the chance of recovering good vision.

What are the risks of vitrectomy surgery?

- Cataract formation
- Infection
- Bleeding
- Retinal detachment
- High pressure in the eye
- Loss of some side (peripheral) vision

It is important not to fly in an aeroplane or to travel to a higher altitude until the bubble of gas has disappeared, as it can cause the eye pressure to be dangerously high.