

## MACULAR HOLE

### What is a macular hole?

The retina is a layer of tissue containing light sensors that lines the back of the eye. The central area of the retina, called the macula, is responsible for clear, detailed vision. A macular hole is an abnormal opening that forms in the centre of the macula.

### What are the symptoms?

In the early stages, vision becomes blurred and distorted. If the hole progresses, a blind spot develops in the central vision. Side vision is normal.

### What causes a macular hole?

Most macular holes are related 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 macular swelling.



### How is it diagnosed?

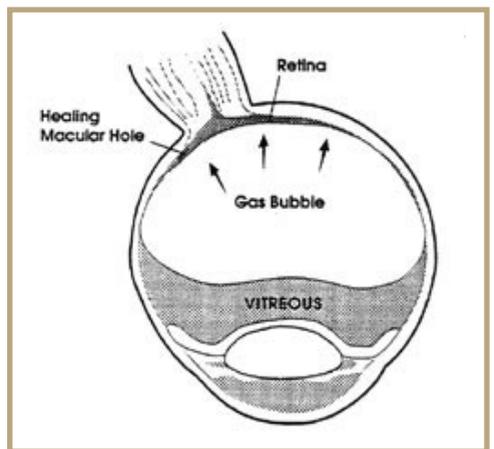
The ophthalmologist diagnoses this condition by looking inside the eye. Special tests such as **ocular coherence tomography** and **fluorescein angiography** may also be performed to confirm the diagnosis.

### How is it 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.

A **posterior vitrectomy** is the only surgical option. During the operation, the surgeon removes the vitreous gel which is pulling on the macula and peels membranes that may be present on the surface of the retina. The eye is then filled with a special gas bubble which will slowly dissolve. After surgery, the patient must lie constantly face down 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?

Some of the risks of vitrectomy include:

- infection
- bleeding
- retinal detachment
- high pressure in the eye
- some loss of side vision
- accelerated cataract formation

**Do not fly in an aeroplane or travel up to high altitude until the gas bubble has fully dissolved.**

An increase in altitude, even during a road trip, can cause a dangerous rise in eye pressure.

Please note that these are general guidelines. If in doubt, consult your ophthalmologist.