Eye floaters are small pieces of debris that float in the eye's vitreous humor. This debris casts shadows onto the retina (the light-sensitive tissue layer at the back of the eye). If you have eye floaters, it is these shadows that you see "floating" across your field of vision.

What if LFR doesn't work for me?

Clinical studies have shown LFR to be a safe, effective treatment in the majority of patients. If floaters persist, however, your ophthalmologist may recommend surgery.

Depending on your diagnosis, there are several forms of surgery available. Performed in the operating room, surgery involves removal of all or part of the vitreous humor, which is then replaced with a balanced, electrolyte saltwater solution. Surgery carries a significant risk of bleeding and infection and can also result in cataract formation. On average, it takes 1-2 hours to perform.

This pamphlet has been prepared based on currently available information and is not intended to recommend a particular procedure. Please consult your ophthalmologist to determine whether vitreolysis is a suitable option for you.

LFR

Eye Floater Management

LFR. Treatment of eye floaters.

What is LFR?

Also known as laser floater removal or vitreolysis, LFR is a non-invasive procedure that can eliminate the visual disturbance caused by eye floaters. The goal of LFR is to achieve a “functional improvement”. That is, to allow you to return to “normal” day-to-day activities without the hindrance of floaters.

How does LFR work?

LFR involves the application of nanosecond pulses of laser light to evaporate the vitreous opacities and to sever the vitreous strands. During this process, the floater's collagen and hyaluronin molecules are converted into a gas. The end result is that the floater is removed and/or reduced in size.

What happens during the procedure?

LFR is performed as an outpatient procedure; you do not have to stay overnight in a hospital.

Immediately prior to treatment, your ophthalmologist will administer eye drops to provide mild anesthesia. A contact lens will then be placed on your eye, with the laser light delivered through a specially designed microscope.

During treatment, you will likely observe small, dark specks/shadows – signaling that the floaters are being evaporated into small gas bubbles. These gas bubbles quickly dissolve and resorb into the vitreous.

Once the treatment is complete, your ophthalmologist may treat your eyes with anti-inflammatory drops.

Each treatment session typically takes 20-60 minutes to perform and most patients will need to undergo two treatment sessions, sometimes three, in order to achieve a satisfactory result.

WHAT IS DEGENERATIVE VITREOUS SYNDROME?

The vitreous humor is the clear, jelly-like substance in the main chamber of the eye, located between the lens and the retina.

At a young age, the vitreous is perfectly transparent. Over time as the eye ages, this vitreous humor can degenerate, losing its form and liquefying. Without the stable vitreous humor, the collagen fibers collapse and bind together to form clumps and knots. It is these fibers, which cast shadows on the retina and appear as spots, strings, or cobwebs that are commonly referred to as “eye floaters.”

In many cases as the eye ages further, the vitreous humor can peel away from the retina entirely. This is known as Posterior Vitreous Detachment (PVD). PVD is often associated with a sudden increase in the number of floaters.

What can I expect after treatment?

You may observe small, dark specks in your lower field of vision immediately following treatment, but these small gas bubbles will quickly dissolve. It is also important to note that some patients may experience mild discomfort, redness or temporarily blurred vision directly following treatment.

Complications and side effects

Reported side effects and complications associated with LFR are rare. Side effects may include cataract and intraocular pressure (IOP) spike.

Who will benefit from LFR?

It is necessary to undergo an ophthalmic examination to determine your eligibility for treatment with LFR.

- Onset of Symptoms: if your floater symptoms develop very quickly then they may be caused by PVD, which can be treated with LFR.
- Floater Characteristics: large floaters with a soft border, situated away from the retina, are ideally suited to treatment with LFR.