

WHAT ARE EYE FLOATERS AND THEIR TREATMENT?

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.

Also known as floater laser treatment, vitreolysis is a non-invasive, pain-free procedure that can eliminate the visual disturbance caused by floaters. The goal of vitreolysis is to achieve a "functional improvement." That is, to allow you to return to "normal" day-to-day activities without the hindrance of floaters.

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.

HOW DOES VITREOLYSIS WORK?

Vitreolysis 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 to a size that no longer impedes vision.

WHAT HAPPENS DURING THE PROCEDURE?

Vitreolysis 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 reabsorb 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 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 vitreolysis are rare. Side effects may include cataract and intraocular pressure (IOP) spike.

WHO WILL BENEFIT FROM VITREOLYSIS?

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

- **Age**—in most cases, younger patients (<45) suffer from microscopic floaters located close to the retina (1-2 mm) and are not considered to be good candidates for vitreolysis treatment.
- **Onset of Symptoms**—if your floater symptoms develop very quickly then they may be associated with PVD, which can be treated with vitreolysis.
- **Floater Characteristics**—large floaters with a soft border, situated away from the retina, are ideally suited to treatment with vitreolysis.

TYPES OF EYE FLOATERS

FIBROUS STRAND FLOATERS

Most common in young people, this thin, dense floater can appear as multiple dots and/or string-like cobwebs and is a result of clumping of the collagen fibers of the vitreous. Depending on size and where it is located, it may be treatable with vitreolysis.



DIFFUSE FLOATERS

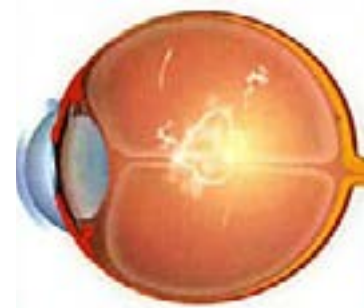
This cloud-like floater is caused by the natural aging process. Whilst this type of floater can sometimes be treated with vitreolysis, it often

requires more overall treatment in order to obtain satisfactory results.



WEISS RING FLOATERS

This ring-shaped floater is a large, fibrous floater that is usually located safely away from the crystalline lens and the retina. Because of this, it can be treated safely and effectively with vitreolysis.



WHAT IF VITREOLYSIS DOESN'T WORK FOR ME?

Clinical studies have shown vitreolysis 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 document has been prepared with currently available information and is not intended to recommend a particular procedure. Please consult your ophthalmologist to learn whether vitreolysis is a solution or option for you.