

## MayoClinic.com reprints

This single copy is for your personal, noncommercial use only. For permission to reprint multiple copies or to order presentation-ready copies for distribution, use the reprints link below.

Order reprints of this article now.

# **Eye floaters**

By Mayo Clinic staff

Original Article: http://www.mayoclinic.com/health/eye-floaters/DS01036

# Definition

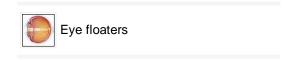
Eye floaters look like black or gray specks, strings or cobwebs that drift about when you move your eyes. Most eye floaters are caused by age-related changes that occur as the jelly-like substance (vitreous humor) inside your eyes becomes more liquid.

When this happens, microscopic fibers within the vitreous humor tend to clump together and can cast tiny shadows on your retina, which you may see as eye floaters.

If you notice a sudden increase in the number of eye floaters, contact an eye specialist immediately especially if you also see flashes of light or lose your peripheral vision. These can be symptoms of a retinal tear or a retinal detachment, which requires prompt attention.

# Symptoms

Eye floaters may look like dark specks or knobby, transparent strings of material floating within your field of vision. These specks and strings move when you move your eyes, so when you try to look at them, they move quickly out of your visual field. In most cases, the floaters eventually settle down to the bottom of the vitreous cavity out of the line of vision. In rare



instances, eye floaters can become so numerous that they significantly interfere with your vision.

Eye floaters are most noticeable when you look at a plain bright background such as a blue sky or a white wall. They can be a nuisance, but most people learn to ignore them.

#### When to see a doctor

Most people have a few floaters bouncing around inside their eyes. But you should contact an eye specialist promptly if you notice a flood of new floaters, especially if you also see flashes of light or lose your peripheral vision. These painless symptoms could be caused by a retinal tear, with or without a retinal detachment — a sight-threatening condition that requires immediate attention. Even waiting a few days can result in permanent loss of sight.

## Causes

Eye floaters most commonly occur as a result of age-related changes in the vitreous humor, the jelly-like substance that fills your eyeballs and helps maintain their round shape. Millions of fine fibers are intertwined within the vitreous humor. These



Retinal detachment

fibers are attached to the retina, the light-sensitive tissue that lines the back of your eyes.

#### Changes occur with age

Over time, the vitreous humor changes in consistency and partially liquefies — a process that causes it to shrink and pull away from the interior surface of the eyeball. Many people over the age of 50 experience this phenomenon to some extent, and the incidence of eye floaters increases with age. As the vitreous humor shrinks and sags, it clumps up and gets stringy. Bits of this debris block some of the light passing through the eye, casting tiny shadows on your retina.

Usually, these changes in the vitreous humor occur gradually. But in some cases, a section of the vitreous humor will pull away from the retina suddenly — causing many new floaters to appear all at once. You might also see flashes of light when the fine fibers in the vitreous humor tug on your retina.

#### Signs of trouble

Sometimes, these fine fibers pull so hard that they cause your retina to tear and pull away from the back of your eye. While a vitreous detachment by itself doesn't threaten your sight, it can cause a retinal tear or a retinal detachment — a medical emergency that requires urgent treatment. A retinal detachment can lead to permanent vision loss.

## **Risk factors**

Risk factors for eye floaters include:

- Age over 50
- Nearsightedness
- Eye trauma
- Complications from cataract surgery
- Diabetic retinopathy
- Inflammation in the eye

## Preparing for your appointment

If you're concerned about your eye floaters, you can make an appointment with a doctor who specializes in eye disorders (an optometrist or an ophthalmologist). If you have complications that require treatment, you'll need to see an ophthalmologist. Here's some information to help you get ready for your appointment, and what to expect from your doctor.

#### What you can do

- Write down any symptoms you're experiencing. Try to make note of any situations that increase the number of eye floaters you see, or times when you see fewer eye floaters.
- Make a list of all medications, as well as any vitamins or supplements, that you're taking.
- Write down questions to ask your doctor.

Your time with your doctor is limited, so preparing a list of questions can help you make the most of your time together. For eye floaters, some basic questions to ask your doctor include:

- Why do I see these eye floaters?
- Will they always be there?
- What can I do to prevent more from occurring?
- Are there any treatments available?
- What types of side effects can I expect from treatment?

- Are there any brochures or other printed material that I can take with me? What Web sites do you
  recommend?
- Do I need to come back for a follow-up appointment, and if so, when?

#### What to expect from your doctor

Your doctor is likely to ask you a number of questions, such as:

- When did you first begin experiencing symptoms?
- Have your symptoms been continuous or occasional?
- Have you recently noticed many new floaters?
- Have you seen flashes of light?
- Does anything seem to improve or worsen your symptoms?
- Do you have any medical conditions such as diabetes or high blood pressure?

## **Tests and diagnosis**

Your doctor will conduct a complete eye exam to make sure your floaters aren't a sign of something more serious. Part of the exam will include looking into your eyes after your doctor has placed pupil-dilating drops into your eyes. Your pupils will remain dilated for about 20 minutes after the exam.

# **Treatments and drugs**

Most eye floaters require no treatment. If your eye floaters are so numerous that they significantly interfere with your vision, your doctor might suggest a surgical procedure (vitrectomy) that uses a hollow needle to withdraw the vitreous humor from your eye. The vitreous humor is replaced with a saltwater solution. However, this procedure can cause a retinal detachment and cataract, and it may not remove all floaters. Laser procedures carry the same serious risks, and are rarely recommended.

References

Dec. 18, 2009

DS01036

© 1998-2011 Mayo Foundation for Medical Education and Research (MFMER). All rights reserved. A single copy of these materials may be reprinted for noncommercial personal use only. "Mayo," "Mayo Clinic," "MayoClinic.com," "EmbodyHealth," "Enhance your life," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and Research.