

Dr Aniruddha Maiti

MBBS, DO, DNB, FRVS, FICO, FICO, MRCSEd (Ophth), FACS, FASRS (USA)

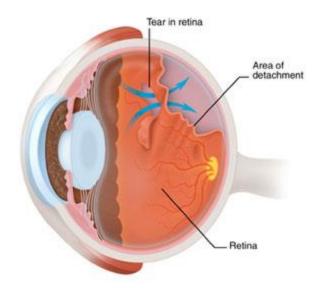
**Vitreo-Retinal Consultant** 

# **Retinal Detachment**

Imagine that your eye is like a camera, and the retina is the film. The retina is a thin, light-sensitive tissue that covers the inside back portion of the eye. Rays of light enter the eye and are focused on the retina by the lens. The retina produces a picture, which is sent along the optic nerve for the brain to interpret. It's rather like the film in a camera being developed so that pictures can be produced.

In most cases retinal detachment is caused by the presence of one or more small holes or tears in the retina.

Retinal detachment is a very serious eye condition that happens when the retina separates from the tissue around it. Since the retina can't work properly under these conditions, you could permanently lose vision if the detached retina isn't repaired promptly.



Less frequently, friction between the retina and vitreous or scar tissue pulls the retina loose, something that occurs most often in patients with diabetes (Tractional Retinal Detachment ). Disease-related swelling or bleeding under the retina can push it away from the eye wall (Exudative Retinal Detachment).

#### Who's at Risk for a Detached Retina?

You're more likely to get a detached retina if you:

- Are severely nearsighted (minus power)
- Have had an eye injury
- Have a family history of retinal detachment

You may have heard the words "retinal tear," too. That's not the same as a retinal detachment.

• Retinal tears often happen first. If fluid from within the eye passes through a retinal tear, that can separate the retina from its underlying tissue -- and that's retinal detachment. Retinal detachment may also happen with no warning. That's more likely in elderly or very nearsighted people.

## What Are the Symptoms of a Detached Retina?

A detached retina doesn't hurt, so look for these symptoms:

- Flashes of light
- Seeing "floaters" (small flecks or threads)
- Darkening of your peripheral (side) vision

Further development of the retinal detachment will blur the central vision and create significant loss of vision unless the detachment is repaired.

### **How Is a Detached Retina Diagnosed?**

Your doctor would examine your eye by indirect ophthalmoscope after dilating your eyes.

Early diagnosis is key to preventing vision loss from a detached retina.

#### **How Is a Detached Retina Treated?**

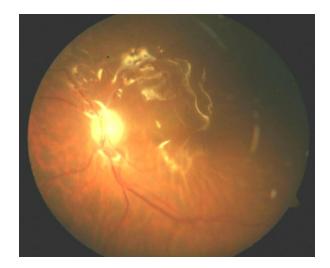
There are many ways to treat a detached retina. These include:

- Laser (thermal) or freezing (cryopexy). Both of these approaches can repair a tear in the retina if it is diagnosed early enough. This procedure is often done in the doctor's office.
- **Pneumatic retinopexy.** This procedure can be used to treat retinal detachment if the tear is small and easy to close. A small gas bubble is injected into the eye (specifically, into the clear, gel-like substance between the lens and the retina), where it then rises and presses against the retina, closing the tear. A laser or cryopexy can then be used to seal the tear.
- **Scleral buckle.** This treatment for retinal detachment involves surgically sewing a silicone band (buckle) around the white of the eye (called the sclera) to push the sclera toward the tear until the tear heals. This band is not visible and remains permanently attached. Thermal treatment may then be necessary to seal the tear.
- **Vitrectomy.** This surgery for retinal detachment is used for large and posterior tears. During a vitrectomy, the doctor removes the vitreous (the clear, gel-like substance between eye's lens and retina) and replaces it with a air, gas or silicon oil.

Fig: Pre operative fundus photo of Retinal Detachment, Vision – Perception of Light



Fig: Post operative fundus photo of attached Retina, Vision improved to 6/24



#### How much will I be able to see after a successful operation?

This depends on how much the retina has detached and for how long. The shadow caused by the detachment will disappear in all cases when the retina has been put back in place. However, if the detachment involves the part of the retina which is responsible for your central vision, this may not recover. The longer this part of the retina has been detached, the smaller the chance that your central vision will recover to its former level. But, if this is the case, you will still have some useful vision left.

#### What happens after the operation?

After one or two days in hospital you are allowed to go home and encouraged to carry on as usual. In order to help the healing process you may be advised to keep your head in a particular position and not do anything that will jerk your head.

#### What happens if the retina is not put back in place?

Most people will lose all useful vision if no operation is carried out, or if the treatment is unsuccessful. Occasionally, if the detachment involves the lower portion of the retina, some vision may recover by itself.

#### Can a Detached Retina Be Prevented?

Yes, in some cases.

Getting an eye exam can flag early changes in your eyes that you may not have noticed. Treating those changes can help.

You should get your eyes checked once a year, or more often if you have conditions such as diabetes that make you more likely to have eye disease. Regular eye exams are also important if you are very nearsighted, as nearsightedness makes retinal detachment more likely.

If you have diabetes or high blood pressure, keeping those conditions under control will help the blood vessels in your retina, which is good for your eyes.

You should also use the appropriate eye protection for certain activities. For instance, you should wear sports goggles with polycarbonate lenses while playing racquetball or certain other sports. You may also need eye protection if you work with machines, chemicals, or tools at work or home.

#### Am I likely to get one in the other eye?

If you have had a detached retina in one eye, there is only about a one in ten chance of it occurring in the other eye.

#### What if my sight cannot be fully restored?

Help can be given to help you utilize your remaining vision with a referral to a Low Vision Aid Clinic. There are many varied optical aids such as magnifiers, bright lights, simple magnifying glasses and other equipment which can help you.`

Many predisposing features like retinal thinning and holes can be treated with much greater success when caught early. As we all know "PREVENTION IS BETTER THAN CURE".