RETINAL DETACHMENT

Retinal detachment
Retinal tear
Vitreous humor

“Immediate attention is necessary”
Definition
Retinal detachment is the separation of the light-sensitive membrane in the back of the eye (retina) form its supporting layers.

What is the vitreous?
It is a jelly-like material that fills most of the space inside the eye. As we age, the vitreous often liquefies and may collapse. When this happens, the vitreous separates from the retina.

What is the retina?
The retina is a thin sheet of light-sensitive nerve tissue lining the inside of the eye. It is the tissue that turns light into an electrical signal to send to the brain.

What is retinal tear?
When the vitreous separates from retina, in some eyes this may result a tear in the retina. These tears are often small and located near the front of the retina. The only symptoms produced by the retinal tear are flashes and/or floaters.

What is retinal detachment?
A retinal detachment is a separation of the retina from the back wall of the eye. When there is a tear of the retina, liquid from the vitreous may pass through the tear, and detach the retina. As the fluid accumulates, the retinal detachment becomes larger. A detached area of the retina loses its function and is damaged.
Causes
- Trauma
- Aging process (those over 50 years)
- Severe diabetes
- Inflammatory disorder
- Retinopathy of prematurity

Risk factors
- Shortsightedness
- Family history
- Trauma
- Uncontrolled diabetes

Signs & symptoms
- Bright flashes of light, especially in peripheral vision
- Translucent specks of various shapes (floaters) in the eye.
- Blurred vision
- Shadow or blindness in a part of the visual field of one eye.

Detached edge
retina
**Tests**

Test to determine the integrity of the retina may include:

- Visual acuity
- Refraction test
- Colour vision test
- Slit lamp examination
- Intraocular pressure determination
- Direct and indirect ophthalmoscopy
- Retinal photography
- Ultrasound of the eye
- Fluorescein angiography
- Electroretinogram
- Optical Coherence Tomography (OCT)

**Prevention**

- Use protective eye wear to prevent trauma
- Control your blood sugar carefully if you have diabetes
- See your eye care specialist yearly

**Treatment**

- **Laser treatment** can be used to seal the tears or holes in the retina before retinal detachment occurs.
- **Surgical reattachment** involves indentation of the sclera to relieve pressure on the retina, allowing it to re-attach.
- **Scleral buckling** is a procedure where the causative retinal tear are located and treated. A flexible piece of silastic is then sewn to the sclera to support the area of tears and detachments. Fluid may be drained from under the detached retina.
Vitrectomy is used for detachments with unusual or difficult features, such as very large tears, scar tissue on the retina, excessive blood in the vitreous, or detachments that failed by other methods.

Pneumatic retinopexy. The causative tear is identified and treated. A bubble of a special gas is then injected into the eye. The gas is used to push against the area of the retinal tear. This method is not suitable for all types of detachment.

Prognosis

The outcome depends upon the location and extent of the detachment and early treatment. If the macula has not detached, the results of treatment can be excellent.

Compilation

The unsuccessful reattachment of the retina can result in vision lost.

The Best Chance For Restoring Sight Relies On Prompt Treatment