

RETINAL
DETACHMENT

UNDERSTAND MORE ABOUT RETINAL DETACHMENT



Tomorrow's Eye Care, Today®



Singapore National
Eye Centre

SingHealth

Retinal Detachment

What is retinal detachment?

A retinal detachment occurs when the retina separates from the outer layers of the eye. The retina is the innermost layer of the eye which acts like the film in a camera. Light rays that enter the eye are focused onto the retina, stimulating the nerve fibres which then send information to the brain to process what we see. If it is not treated early, retinal detachment may lead to permanent loss of vision which may be partial or even complete.



Normal vision



Vision with
retinal detachment

What causes retinal detachment?

Retinal detachment occurs after a tear in the retina develops, allowing fluid to pass through it to separate the retina from the wall of the eye. Over time, the detachment may cause the retina to lose contact with the blood supply of the eye and stop functioning. This is when you lose your vision.

Who is at risk of retinal detachment?

Your risk increases if you:

- Are over 40 years old
- Have had retinal detachment in one eye previously
- Have myopia (short-sightedness)
- Have a family history of retinal detachment
- Have had any eye surgery (e.g. cataract surgery)
- Have sustained eye injuries or trauma in the past

What are the symptoms?

The initial symptoms are usually a sudden increase in either the number of floaters, which are little “cobwebs” or specks that float about in your field of vision, and/or light flashes in the eye.

Another symptom is the appearance of a curtain over your field of vision. A retinal detachment is a medical emergency. If you experience the symptoms of a retinal detachment, you should see an ophthalmologist immediately. If too much time lapses, the chances of successfully repairing the retina through surgery will be lower, and you may develop permanent vision loss.

How is retinal detachment diagnosed?

The following tests, instruments and procedures may be needed to diagnose retinal detachment.

- **Ophthalmoscope.** The ophthalmologist may use an instrument with a bright light and a special lens to examine the inside of your eye. The ophthalmoscope provides a

highly detailed 3D view, allowing the ophthalmologist to see any retina holes, tears or detachments.

- **Ultrasonography.** This test uses sound waves to create a picture on a video monitor. The sound waves travel through your eye and bounce off your retina and other structures within the eye to create the image.

What are the treatment options?

A laser or surgery is usually used to repair a retinal tear, hole or detachment. Your ophthalmologist will discuss the risks and benefits of your treatment options with you. Together, you can determine what treatment is suitable.

Retinal Tears

When a retinal tear or hole has not progressed to a retinal detachment, your ophthalmologist may suggest an outpatient procedure to seal the tear or hole to prevent retinal detachment.

Retinal Detachment

- **Laser surgery (photocoagulation)**

The ophthalmologist directs a laser beam at the retinal tear. The burns produced by the laser will adhere the retina to the underlying tissue.

- **Freezing**

In this process, a freezing probe is applied to the outer surface of the eye directly over the retinal tear or hole to freeze the area around the hole. The scar that subsequently develops will help to secure the retina to the eye wall.

After the procedure, you may be advised to refrain from vigorous activity for one month to allow time for the bonds created by the procedure to strengthen.

Retinal Detachment

If your retina has detached, surgical procedures will be required to repair it. The specifics of your retinal detachment will determine which approach your ophthalmologist recommends.

- **Scleral buckling.** Your ophthalmologist may choose to place a scleral buckle which is a silicon band that encircles the eye like a belt. The scleral buckle seals the retinal tears externally.
- **Vitrectomy.** A vitrectomy involves removing the vitreous (the jelly-like substance in the eye cavity) and filling the eye with a gas bubble to hold the retina in place, giving it time to heal. After a vitrectomy, your ophthalmologist may ask you to maintain a certain head posture for a few weeks to position the gas bubble against the hole or tear in the retina.

With modern therapy, over 90 per cent of those with a retinal detachment can be successfully treated with one procedure, although sometimes a second operation may be required. The degree of vision that returns after successful surgery will vary depending on the extent and duration of the retinal detachment.

LOCATION MAP



Legend

- MRT Station
- Taxi Stand
- EW East West Line
- NE North East Line
- Shuttle Bus Service
Mon to Fri (8.00am - 7.00pm)
Sat (8.00am - 2.00pm)

Opp Outram Park Stn
Bus No. 33, 63, 75, 121,
122, 174, 174e, 851, 970

Outram Park Stn Exit F
Bus No. 61, 124, 143, 147,
147e, 166, 197, 961, 961C

Outram Park Stn/Outram Rd
Bus No. 33, 63, 75, 121, 122, 174,
174e, 534, 535, 549, 761, 851, 970

This patient information leaflet is a general guide to help patients understand specific eye conditions, treatment or tests. The information does not replace the need for individual advice from an ophthalmologist. Please consult with your ophthalmologist about your specific eye condition and/or concerns.

The contents of this leaflet are not to be produced in any form without the prior permission of the Singapore National Eye Centre.

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