

Retinal Detachment

“The time bomb”

What is Retina?

It is the innermost layer of the eye responsible for vision.

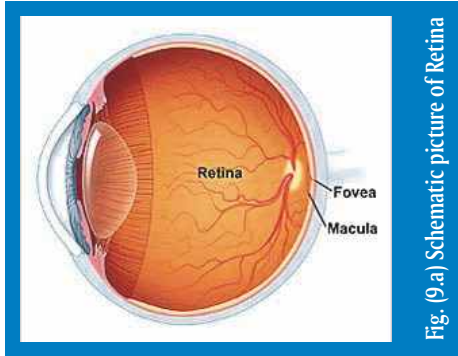


Fig. (9.a) Schematic picture of Retina

What is Retinal Detachment? (R.D)

It is the separation of retina from the outer layers of the eye.

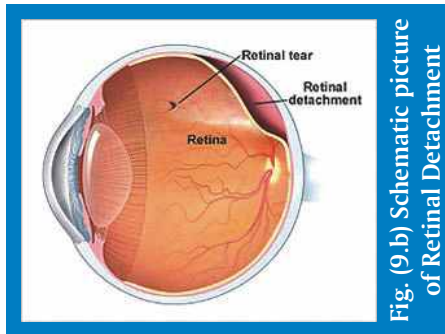


Fig. (9.b) Schematic picture of Retinal Detachment

Who are at risk?

- Patients with family history of Retinal Detachment.
- Preterm babies.
- Patients with holes/tears in their Retina.
- Birth defects in the Retina.
- Patients with high minus power(MYOPES - Short Sight)

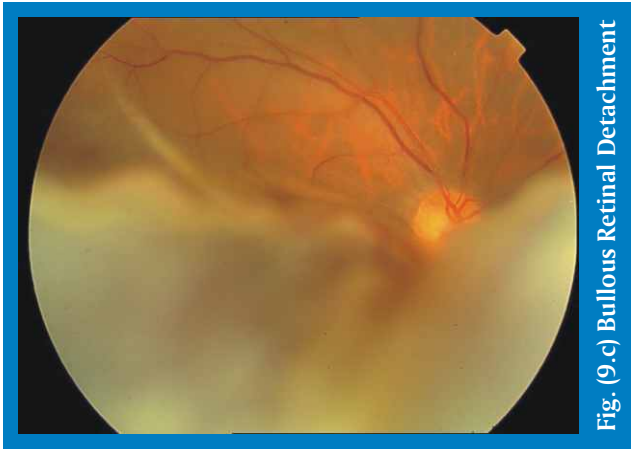


Fig. (9.c) Bullous Retinal Detachment

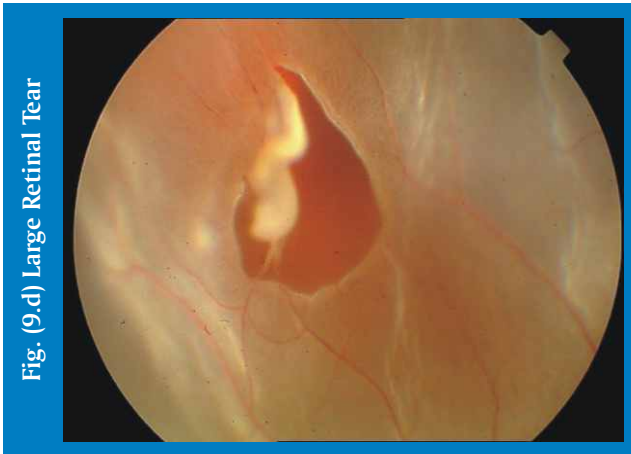


Fig. (9.d) Large Retinal Tear

- Following inflammation/ infection of the eye.
- Any injury to the eye.
- Tumours affecting the inner layer of the eye.

Symptoms

- Sudden loss or blurring of vision manifesting as partial or complete loss of visual field.
- Sudden appearance of numerous black spots.
- Flashes of light occurring by itself or following injury.

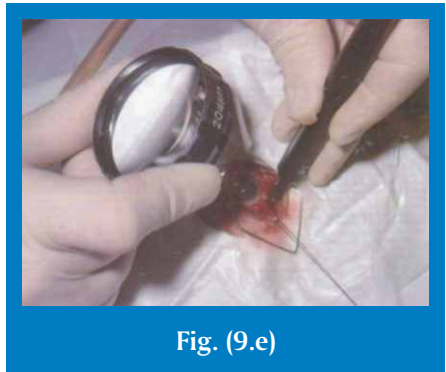
The diagnosis is made with the help of

- Indirect ophthalmoscope with +20 D lens and scleral indentation.
- Slit lamp bio-microscope with +78D and +90D lens.
- Ultrasound 'A' & 'B' scan

Treatment

For tears / breaks in retina

1. Cryotherapy



- #### 2. Laser Photocoagulation using slit lamp delivery or indirect ophthalmoscope.

- #### 3. Surgery- Sub retinal fluid drainage, Scleral buckling and Vitrectomy.



Pneumoretinopexy- is an out patient procedure wherein an expanding gas bubble is used to seal a retinal break and re-attach the retina.



Fig. (10.h)
Pre-Pneumoretinopexy

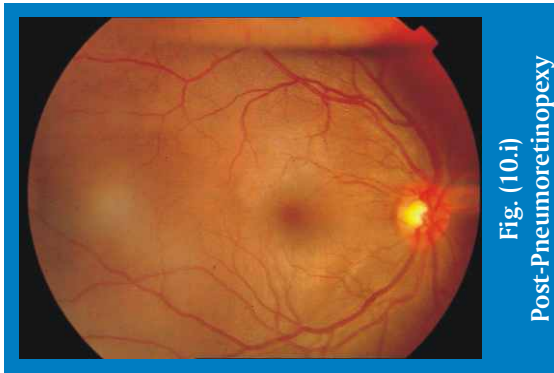


Fig. (10.i)
Post-Pneumoretinopexy

High tech equipments used

- 1) BIOM(Binocular Indirect Ophthalmic Microscope) to visualize the retina during surgery.
- 2) Endo illuminator, Endo laser, and micro vitreous Instrumentation.
- 3) Accurus -Alcon(USA) microsurgical Vitrectomy system.
- 4) Bausch and Lomb(USA) microsurgical Vitrectomy system .

Caveats :

- Patients with high myopia > -5 to -6 are more prone to retinal detachment.
- Regular retinal examination is necessary to diagnose retinal tear or holes or weak areas in retina.
- Sudden onset of flashes or floaters is a sign of retinal detachment
- Laser treatment, Cryotherapy, Pneumoretinopexy, Scleral buckling may be treatment of choice depending upon stage of Retinal detachment.