Cataract surgery is the most commonly performed procedure and carries a high expectation for visual improvement.

Retinal detachment is one of the most serious complications following cataract surgery.
Estimated to range between 0.6 and 1.7% in the first postoperative year and continues over time, with an overall incidence of 0.7%.

Cataract surgery increases the risk of retinal detachment at least four fold.

**Risk Factors**

**Younger patient**

Younger age remains a significant risk factor for pseudophakic RRD

- 6.65% → patients 50 years or younger
- 2.57% → in patients between 50 and 60 years
- 2.01% → in patients older than 60 years
**Risk Factors**

**High myopia** (axial length greater than or equal to 26mm)
- 2.44% → Eyes with axial length of 23–25mm
- 6.14% → Eyes greater than or equal to 26mm

**Posterior Capsular Rupture.**
- one of the most significant risk factors for pseudophakic RD
- Eyes with PCR and vitreous loss had a 13–16 times higher risk for RD compared with eyes with an intact capsule. (2016)
**Posterior Capsular Rupture**

- Anterior movement of the vitreous as a result of PCR induces dynamic traction on the vitreous with a consequent retinal tear formation.

- Iatrogenic vitreoretinal traction from an unrecognized or poorly managed capsular rupture at the time of cataract surgery has been associated with a very high incidence of early postoperative retinal detachment, often from large and complex retinal tears.

**Clinical Findings**

**Presentation and Time Course**

- Over 50% of pseudophakic detachments present within 1 year of cataract surgery; 25% to 35% present over the next 2 to 3 years.

- Following Nd- YAG capsulotomy, the greatest risk is in the first 6 months, and most of the detachments occur within 2 years.
Clinical Findings

**Ophthalmoscopic Examination**

**Pseudophakic detachments**
- Generally more extensive than phakic RD
- Often very bullous, overhanging the macula
- Macula is already detached at presentation in more than 3/4 of pseudophakic detachments.

**Pseudophakic breaks**
- Small flap tears or oval holes.
- Located just at the posterior border of the vitreous base.
- Large flap tears are occasionally seen.

*Detection of pseudophakic retinal breaks is generally difficult, primarily because of their very anterior location, small size and incomplete peripheral fundus view because of anterior or posterior capsule fibrosis, cortical remnants, small pupil, vitreous opacities. Despite careful ophthalmoscopic examination, the causative retinal break is not detected clinically in up to 20% of pseudophakic detachments.*
Surgical Management

- Scleral Buckling (SB). *less effective than in phakic RD*
- Pars plana vitrectomy. *gaining popularity*
- Pars plana vitrectomy and SB. *debatable*

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Pars plana vitrectomy

**Advantages of vitrectomy over scleral buckling.**

- Greater ability of visualizing retinal breaks
  - with wide-angle viewing systems and scleral depression
  - with the help of perfluorocarbon liquids and the Schlieren phenomenon
- Absence of refractive shift.
- Clearance of vitreous floaters.
Pars plana vitrectomy

**Disadvantages of pars plana vitrectomy over scleral buckling**

- Costly surgery.
- You may need 2nd surgery......SOR.
- The requirement for postoperative positioning.
Thank you