

18th International Conference of the
Research Institute of Ophthalmology

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ROYAL MAXIM PALACE KEMPINSKI, CAIRO

Game ON

With The Experts



Argentinean Flag Sign

- Brief: Occurs during capsulorhexis in intumescent (swollen) white cataracts. High pressure in the lens bag causes a spontaneous radial tear that extends to the periphery, creating blue-white-blue stripes.
- Significance/Treatment: Highly risky; can lead to a "wrap-around" tear and vitreous loss. Treatment involves reducing intralenticular pressure via needle aspiration before starting the tear.



8-Ball Hyphema

- Brief: A total hyphema where the anterior chamber is filled with dark, black-to-purple blood (deoxygenated).
- Significance/Treatment: Indicates a high risk of secondary glaucoma and corneal blood staining. Treatment requires aggressive IOP lowering; surgical washout is indicated if IOP remains uncontrolled or if corneal staining begins.



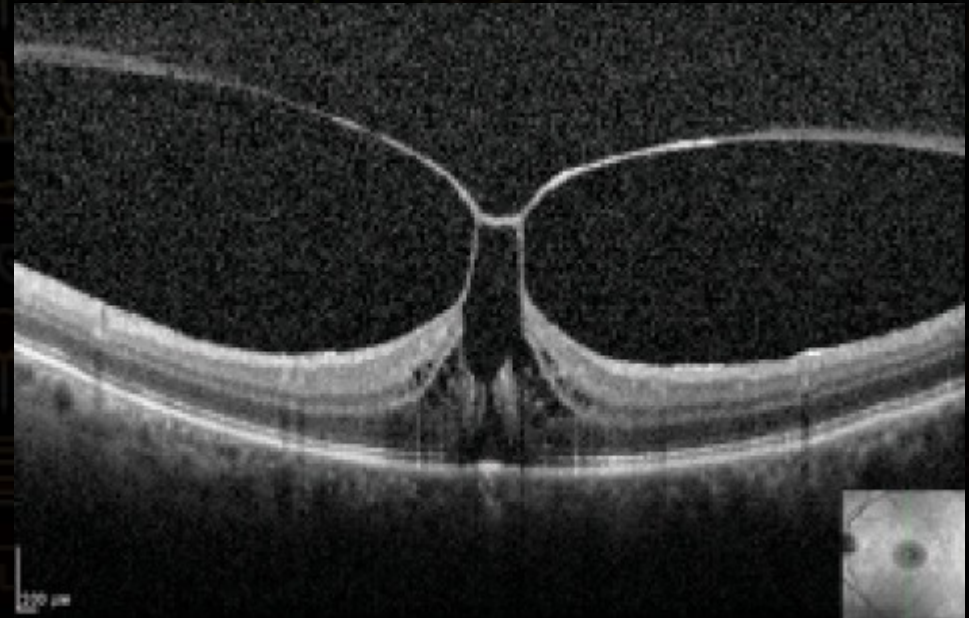
Seagull Sign (Ultrasound/OCT)

Ultrasound:

- Brief: An ultrasonographic finding where a total retinal detachment appears as a V-shaped or "winged" membrane still anchored at the optic disc and ora serrata.
- Significance/Treatment: Used to diagnose retinal detachment when the back of the eye cannot be seen due to cataracts or blood. Treatment typically involves vitrectomy or scleral buckling.

OCT:

- Brief: Incomplete PVD where the vitreous remains persistently adherent to the fovea, exerting an inward "tugging" force that distorts retinal layers.



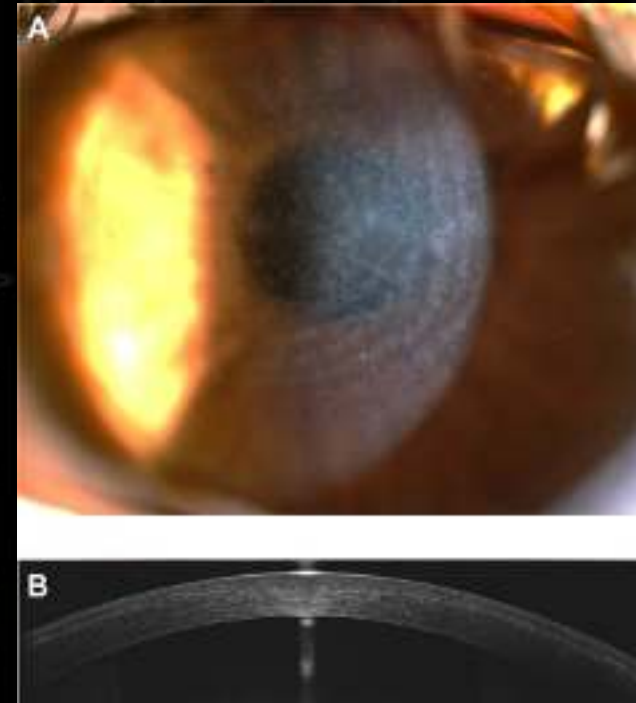
Elschnig Pearls

- Brief: A type of Posterior Capsule Opacification (PCO) where residual lens epithelial cells migrate and proliferate, forming tiny, pearl-like clusters.
- Significance/Treatment: Causes decreased vision months/years after cataract surgery. Treatment is a quick, non-invasive YAG Laser Capsulotomy.



Sands of the Sahara (DLK)

- Brief: Non-infectious inflammation under a LASIK flap, appearing as fine white granular deposits.
- Significance/Treatment: Can lead to corneal melting and scarring. Treatment involves intensive topical steroids; severe cases require lifting the flap and irrigating the interface.

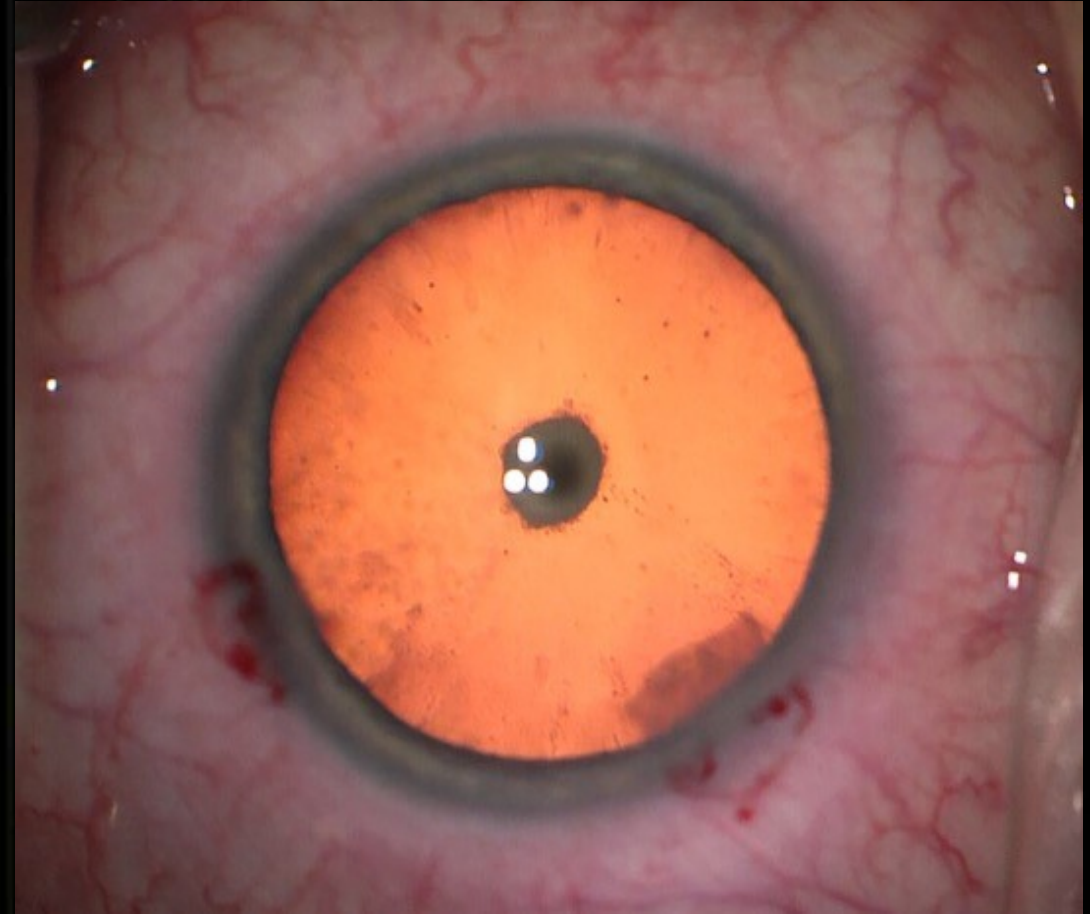


Pupil Snap Sign

- Brief: A sudden, brisk pupillary constriction (snapping). It is a critical intraoperative indicator of a posterior capsular rupture.
- Significance/Treatment: The sudden sag of the nucleus after the burst causes the pupil to constrict. Treatment involves stopping immediately to assess for a dropped nucleus or vitreous loss.

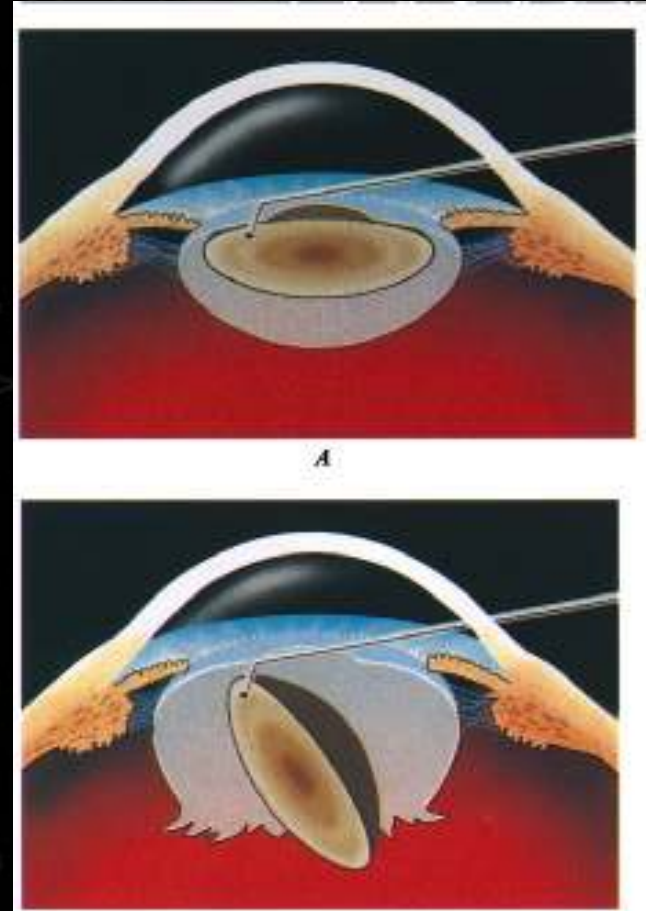
Posterior Polar Cataract

- Brief: A congenital, well-defined discoid opacity located on the central posterior capsule.
- Significance/Treatment: Significant because the posterior capsule is often very thin or absent behind the opacity. Treatment requires specialized surgical techniques (avoiding hydrodissection) to prevent a massive posterior capsule rupture.



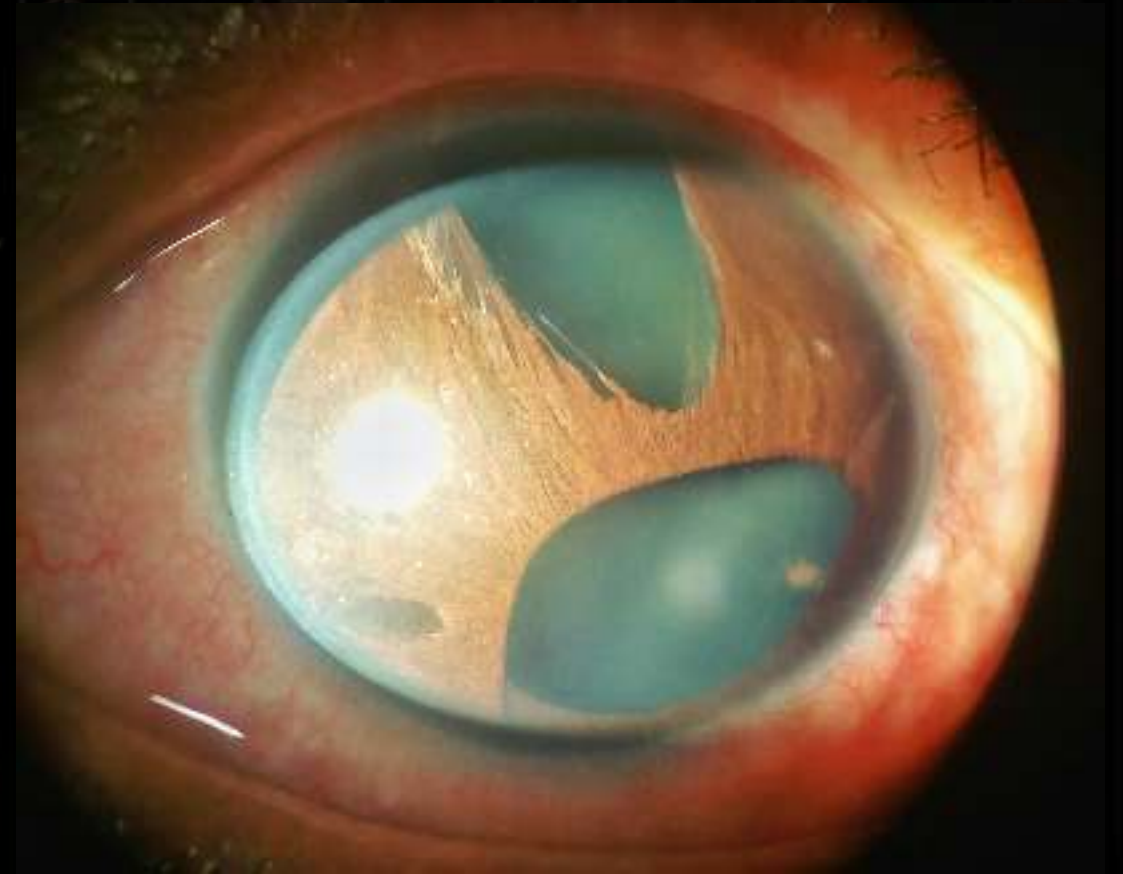
Intraoperative Capsular Block Syndrome

- Brief: a rare but serious surgical complication that occurs during cataract surgery, specifically during the hydrodissection phase.
- Significance/Treatment: It is characterized by the sudden entrapment of fluid behind the lens nucleus, which can lead to a posterior capsule rupture and the dislocation of the lens into the vitreous cavity.



ICE Syndrome (Iridocorneal Endothelial)

- Brief: A trio of conditions (Progressive Iris Atrophy, Chandler Syndrome, Cogan-Reese), typically unilateral, where abnormal corneal endothelium migrates over the iris.
- Significance/Treatment: Causes severe glaucoma and iris distortion. Treatment focus is on managing IOP, often requiring tubes or shunts as medical therapy often fails.

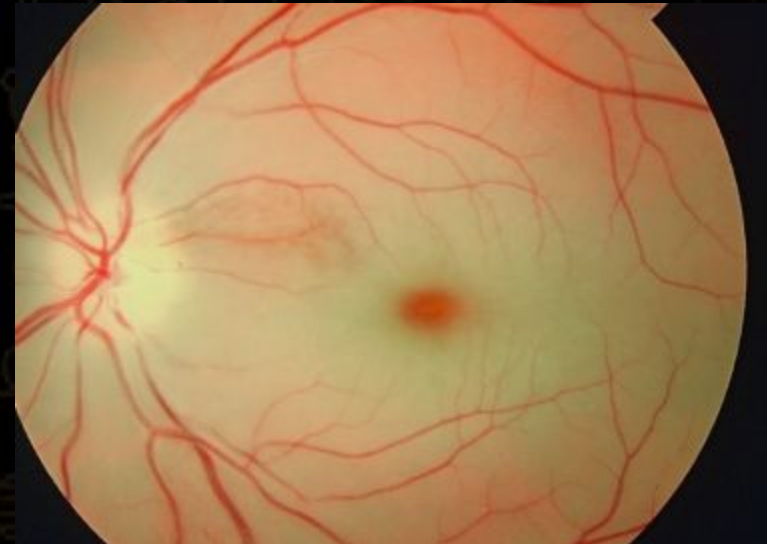


Stickler Syndrome

- Brief: A connective tissue disorder characterized by "optically empty vitreous," high myopia, and facial/skeletal abnormalities.
- Significance/Treatment: High risk of giant retinal tears and rhegmatogenous retinal detachment.

Central Retinal Artery Occlusion (Cherry Red Spot)

- Brief: Sudden, painless vision loss. The retina appears pale/white due to edema, but the fovea remains red (choroidal blood showing through the thin foveal tissue).
- Significance/Treatment: An Ocular Emergency. Treatment (though often ineffective) includes ocular massage, anterior chamber paracentesis, and hyperbaric oxygen to restore flow.



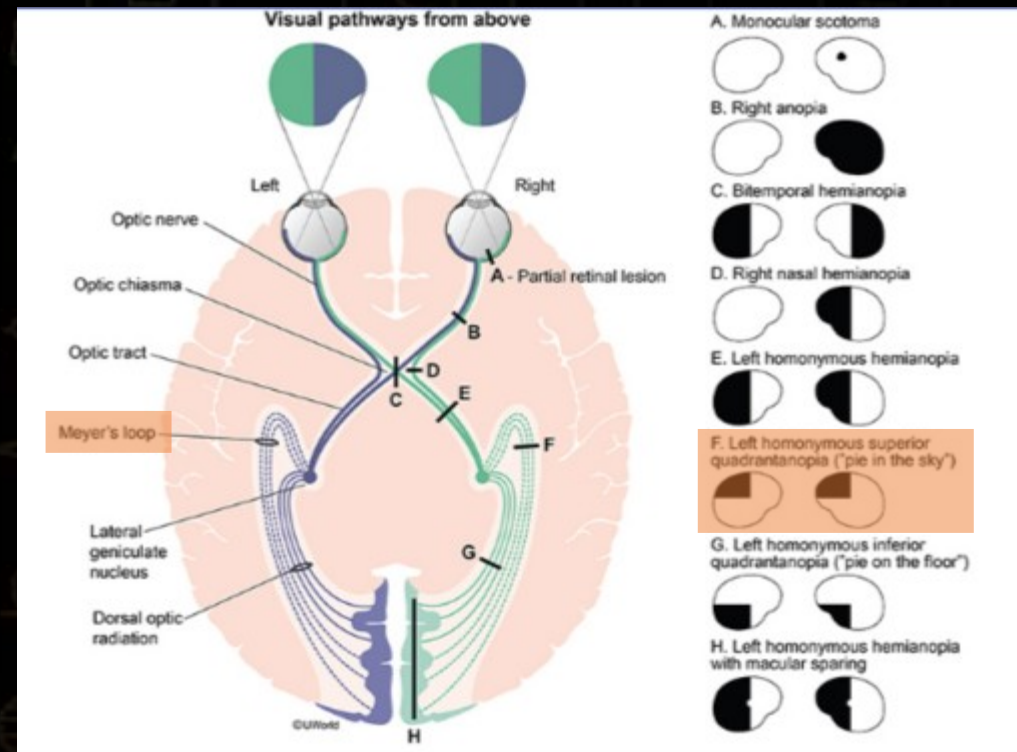
Toxoplasma Retinitis (Headlight in the Fog)

- Brief: Active, white retinochoroiditis (the headlight) seen through an overlying dense vitreous inflammation (the fog).
- Significance/Treatment: Caused by *Toxoplasma gondii*. Treatment involves the "Classic Triple Therapy" (Pyrimethamine, Sulfadiazine, and Prednisone).



Meyer's Loop Damage (Pie in the Sky)

- Brief: Damage to the temporal lobe optic radiations (Meyer's loop).
- Significance/Treatment: Results in a Superior Homonymous Quadrantanopia. Significance lies in localizing brain lesions (often tumors or post-temporal lobectomy).



Retinal Snail Tracks

- Brief: Sharply demarcated bands of glistening, white-ish retinal thinning in the periphery.
- Significance/Treatment: Similar to Lattice Degeneration; can lead to atrophic holes. Treatment is observation unless a symptomatic tear develops.
- Section 5: Neuro-Ophthalmology & Strabismus



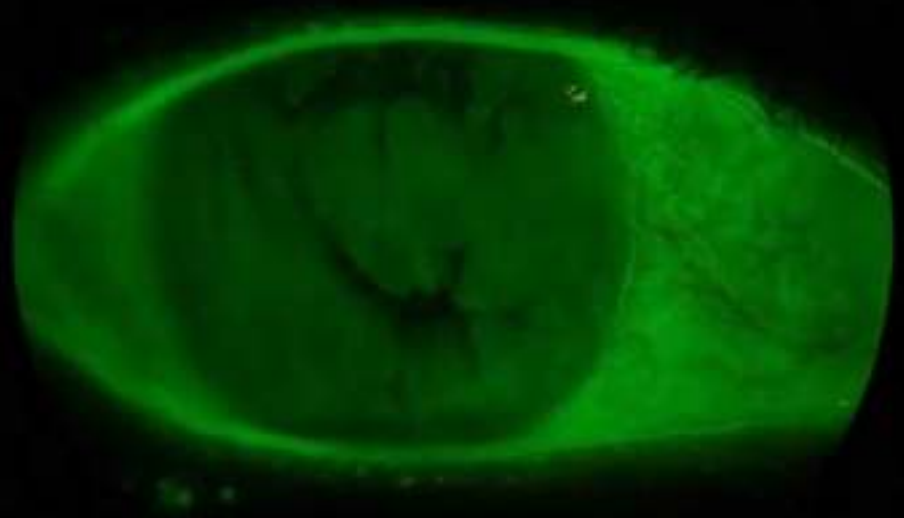
Port Wine Stain (Nevus Flammeus)

- Brief: A flat, purple-red birthmark on the face, often following the distribution of the trigeminal nerve.
- Significance/Treatment: Strongly associated with Sturge-Weber Syndrome, which carries a high risk of ipsilateral glaucoma and choroidal hemangiomas.



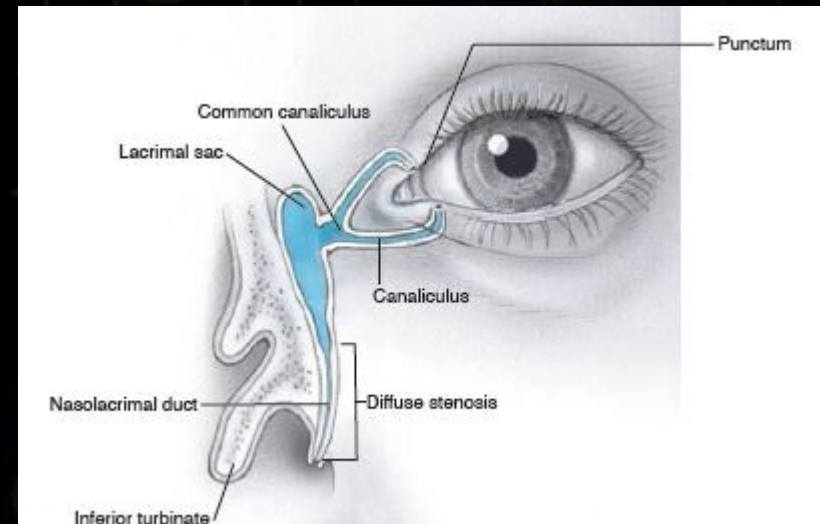
Tear Break Up Time (TBUT)

- Brief: A diagnostic test where fluorescein dye is added to the eye and the time taken for dry spots to appear on the cornea is measured.
- Significance/Treatment: A TBUT under 10 seconds indicates tear film instability or dry eye. Treatment includes artificial tears or punctal plugs.



Nasolacrimal Duct Obstruction (NLDO)

- Brief: A blockage of the drainage system that carries tears from the eye to the nasal cavity. It can be congenital (common in infants) or acquired (due to age or infection).
- Significance/Treatment: Causes chronic tearing (epiphora) and recurrent infections (Dacryocystitis). Treatment in infants usually starts with Crigler massage; if it persists, surgical probing or a Dacryocystorhinostomy (DCR) may be required.



Tolosa-Hunt Syndrome

- Brief: Painful ophthalmoplegia caused by non-specific granulomatous inflammation in the cavernous sinus or superior orbital fissure.
- Significance/Treatment: Diagnosis of exclusion. Treatment is typically a dramatic response to Systemic Steroids.

Sjogren Syndrome

- Brief: A systemic autoimmune disease characterized by the "classic triad" of dry eyes (keratoconjunctivitis sicca), dry mouth, and rheumatoid arthritis.
- Significance/Treatment: Causes severe ocular surface damage. Treatment involves intensive lubrication and systemic immunosuppressants.

Crocodile Shagreen

- Brief: A benign, bilateral corneal degeneration characterized by gray-white polygonal opacities in the stroma (resembling crocodile skin).
- Significance/Treatment: Primarily age-related and asymptomatic. Treatment is generally not required as it does not typically affect vision.



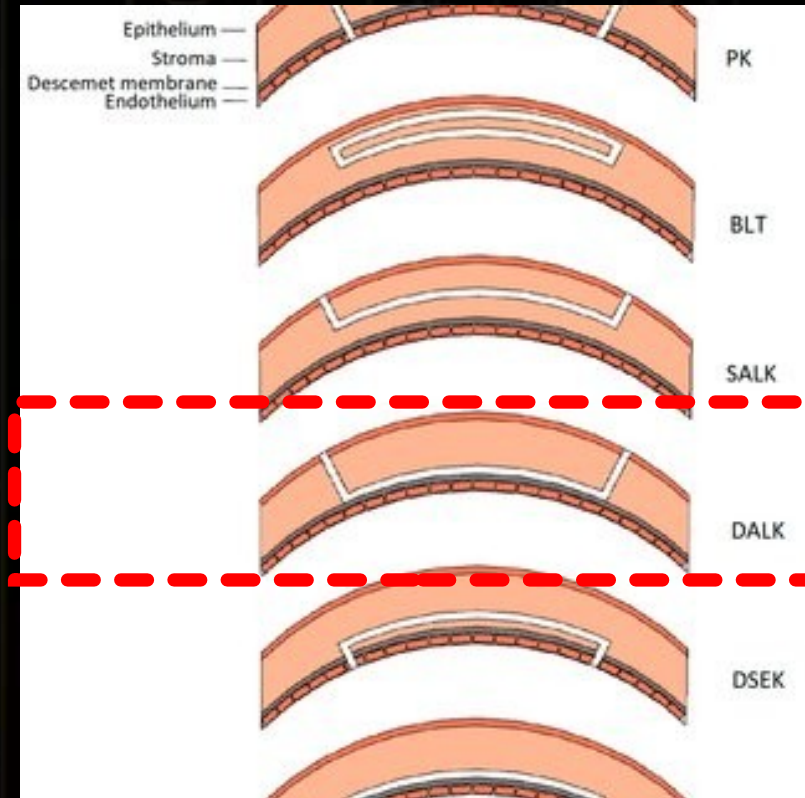
Band Keratopathy

- Brief: Deposition of calcium in the corneal basement membrane, forming a horizontal "band" across the palpebral aperture.
- Significance/Treatment: Associated with chronic inflammation (Uveitis) or hypercalcemia. Treatment involves Chelation using EDTA to remove the calcium.



DALK (Deep Anterior Lamellar Keratoplasty)

- Brief: A partial-thickness corneal transplant where the host's endothelium and Descemet's membrane are preserved.
- Significance/Treatment: Used for diseases like Keratoconus. It has a much lower risk of rejection compared to full-thickness grafts.



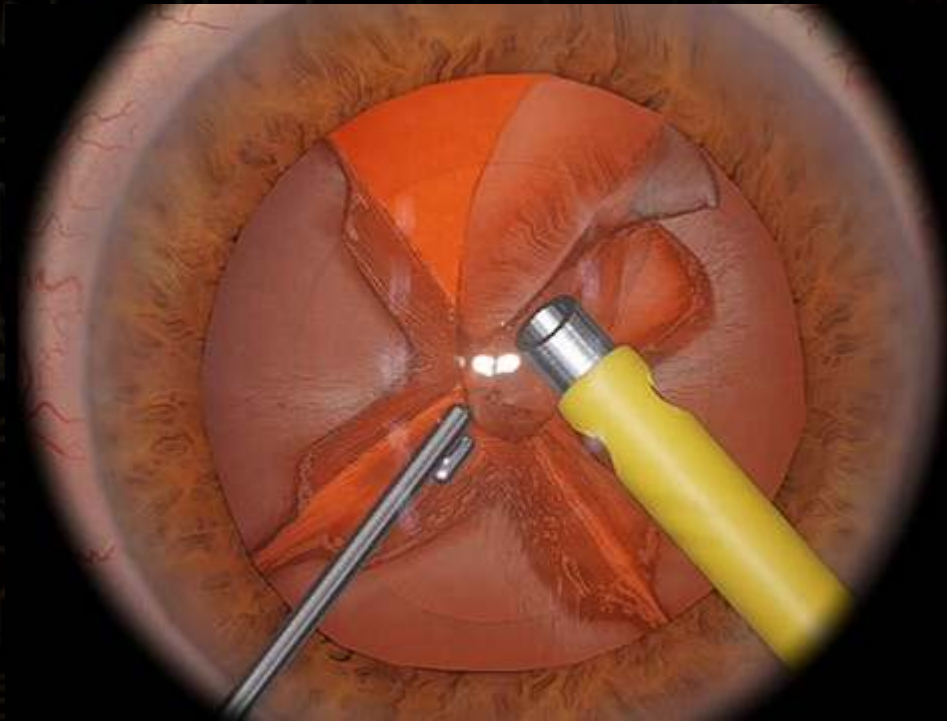
Christmas Tree Cataract

- Brief: Glittering, multi-colored (polychromatic) needle-like opacities in the lens cortex.
- Significance/Treatment: Often associated with Myotonic Dystrophy. Treatment is standard cataract surgery if visual acuity is significantly affected.



Divide and Conquer

- Brief: The foundational phacoemulsification technique where the surgeon sculpts two deep, perpendicular grooves (forming a cross) into the lens.
- Significance/Treatment: The cross-grooves allow the nucleus to be cracked into four quadrants. It is the safest method for beginners but uses more ultrasound energy than chopping.



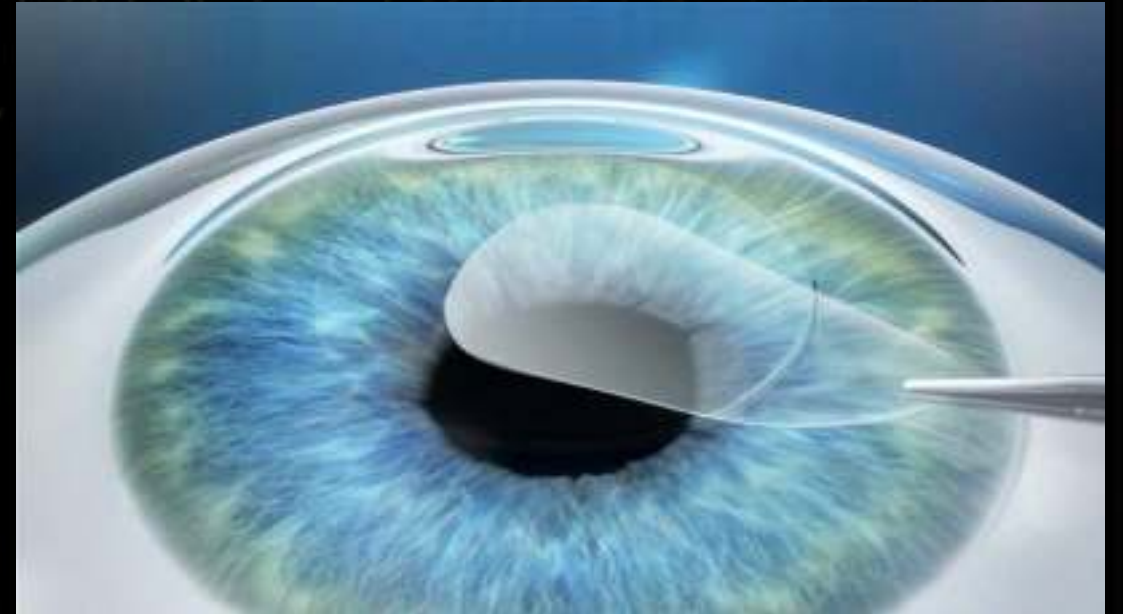
Stop and Chop

- Brief: A hybrid technique where the surgeon sculpts one single groove to crack the nucleus in half ("Stop"), then uses a chopper to fragment the halves into smaller pieces ("Chop").
- Significance/Treatment: Combines the stability of sculpting with the efficiency of chopping, reducing total ultrasound energy and corneal endothelial stress.



Femto SMILE (Small Incision Lenticule Extraction)

- Brief: A "flapless" laser vision correction procedure where a femtosecond laser creates a small, disc-shaped piece of tissue (lenticule) inside the cornea, which is then removed through a tiny incision.
- Significance/Treatment: Offers faster recovery of corneal nerves and less dry eye risk compared to traditional LASIK.



Lamellar Cataract

- Brief: A congenital cataract where an opacity affects a specific "layer" or "lamella" of the lens, usually with "riders" (linear opacities) extending outward.
- Significance/Treatment: Most common type of congenital cataract. Treatment is observation unless it is large enough to be amblyogenic (vision-threatening).



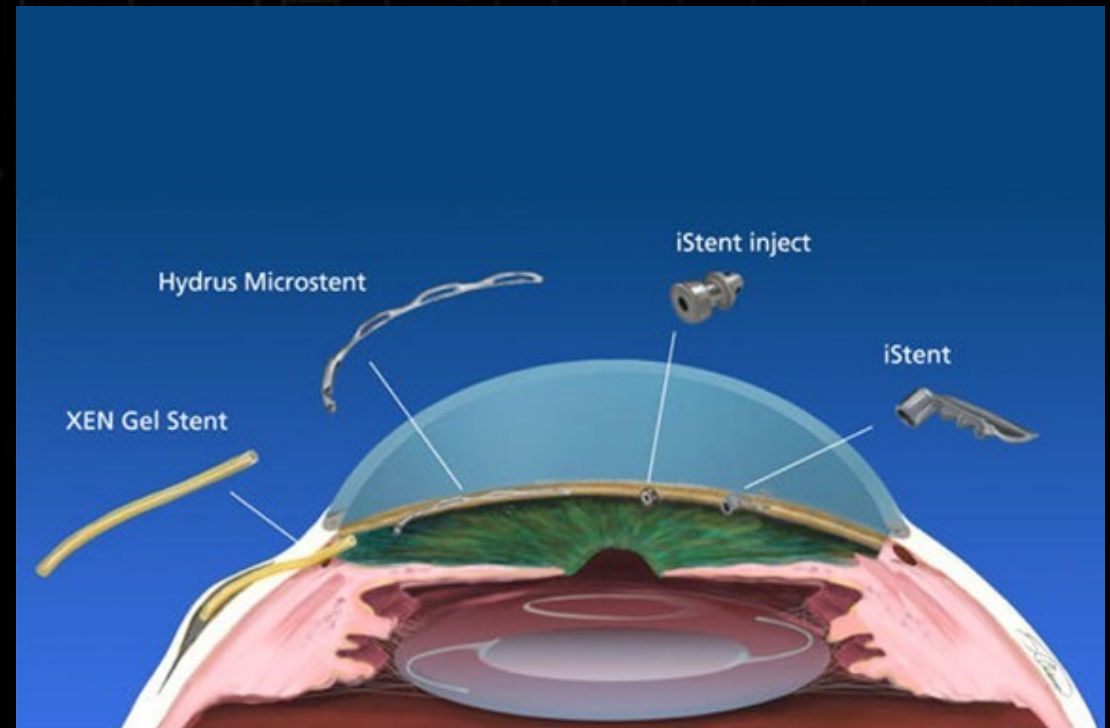
Neurofibromatosis Type 1 (Café au Lait)

- Brief: Systemic condition with "coffee with milk" skin spots, Lisch nodules (iris hamartomas), and optic nerve gliomas.
- Significance/Treatment: Requires multidisciplinary monitoring for tumors and glaucoma.



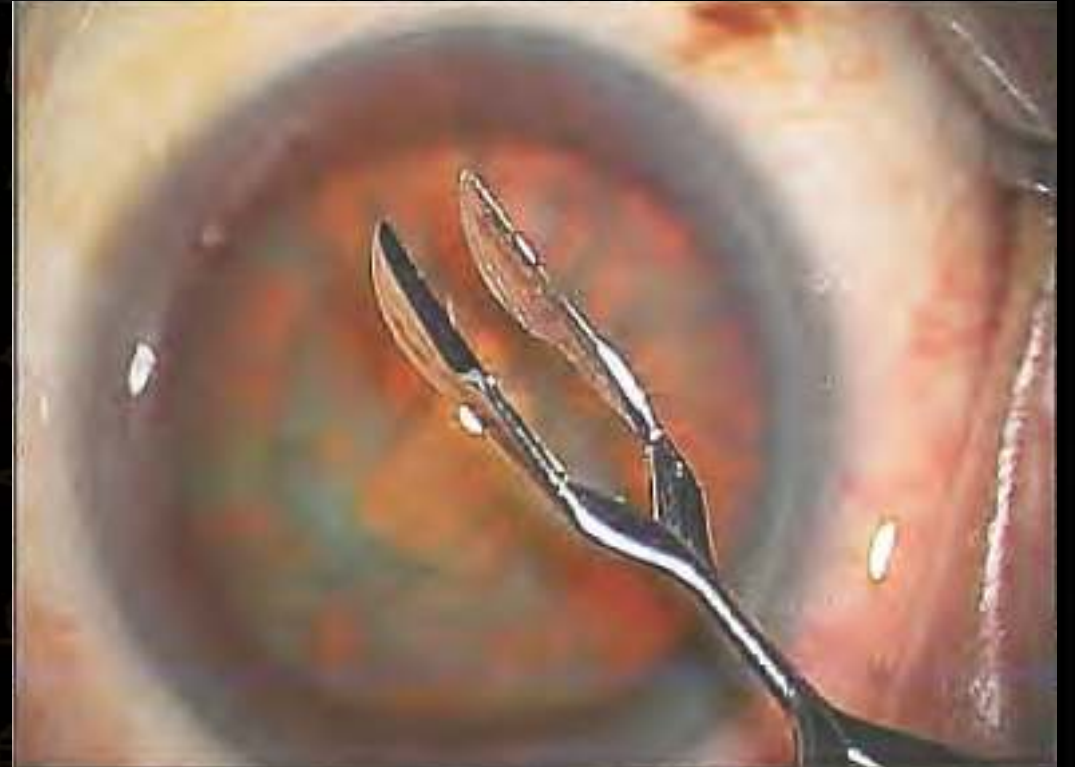
MIGS (Minimally Invasive Glaucoma Surgery)

- Brief: A group of surgical procedures (e.g., iStent, Hydrus) designed to lower IOP with less trauma than traditional trabeculectomy.
- Significance/Treatment: Generally performed in conjunction with cataract surgery for mild-to-moderate glaucoma to reduce the patient's drop burden.



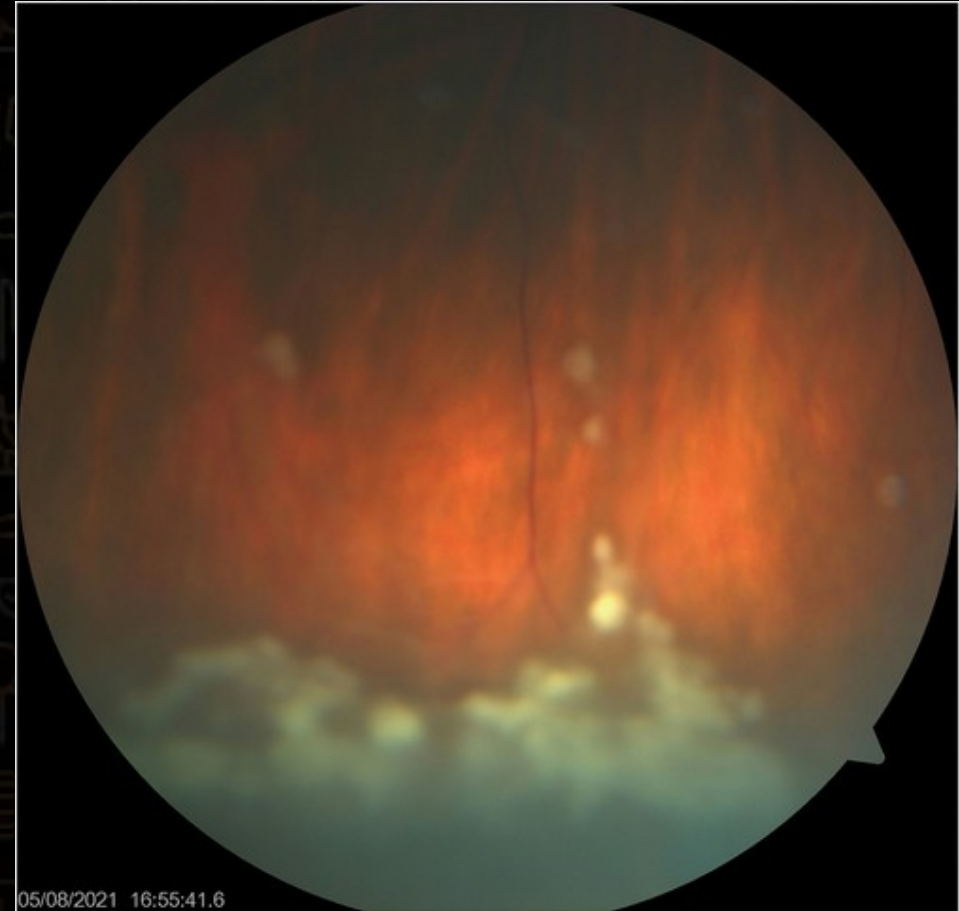
Akahoshi Pre-chopper

- Brief: A specialized surgical instrument designed to manually split the lens nucleus into fragments before using the phacoemulsification probe.
- Significance/Treatment: By mechanically dividing the lens first, it significantly reduces the ultrasound time and energy required, protecting the corneal endothelium.



Intermediate Uveitis (Snowbanking & Snowballs)

- Brief: "Snowballs" are clumps of inflammatory cells in the vitreous; "Snowbanking" is white exudative material over the pars plana.
- Significance/Treatment: Often idiopathic or associated with MS or Sarcoidosis. Treatment involves regional steroid injections or systemic immunosuppression.



Cotton Wool Spots

- Brief: Small, yellowish-white, "fluffy" clouds in the nerve fiber layer of the retina caused by micro-infarcts (focal ischemia).
- Significance/Treatment: A major sign of diabetic retinopathy, hypertension and vascular occlusion. Treatment focuses on managing the underlying systemic disease.



Flame-Shaped Hemorrhages

- Brief: Splinter-like hemorrhages located in the superficial nerve fiber layer of the retina.
- Significance/
Treatment: Classically associated with hypertensive retinopathy or vein occlusions. Like cotton wool spots, they indicate systemic vascular stress.



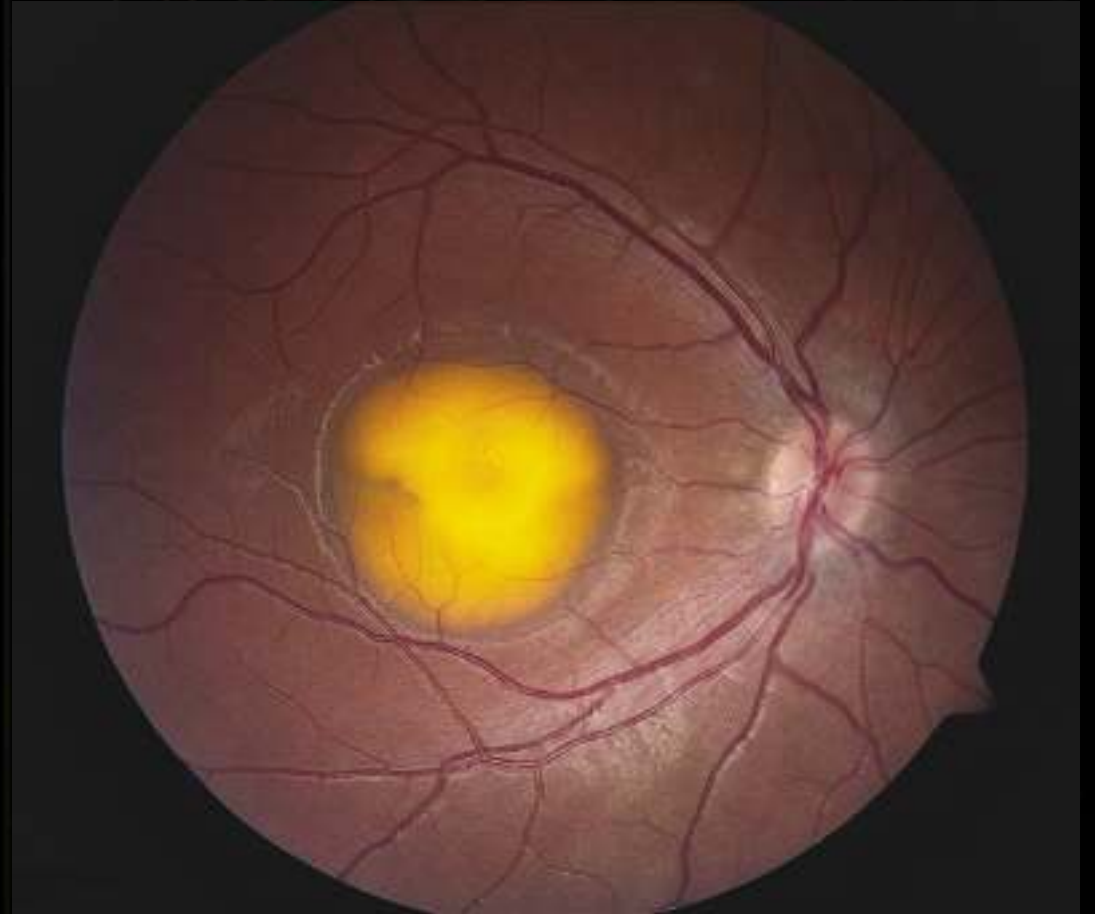
Coats Disease

- Brief: Idiopathic condition characterized by telangiectatic and aneurysmal retinal vessels with massive subretinal exudation ("Light Bulb" appearance).
- Significance/Treatment: Usually affects young males unilaterally. Treatment is laser photocoagulation or cryotherapy to the abnormal vessels.



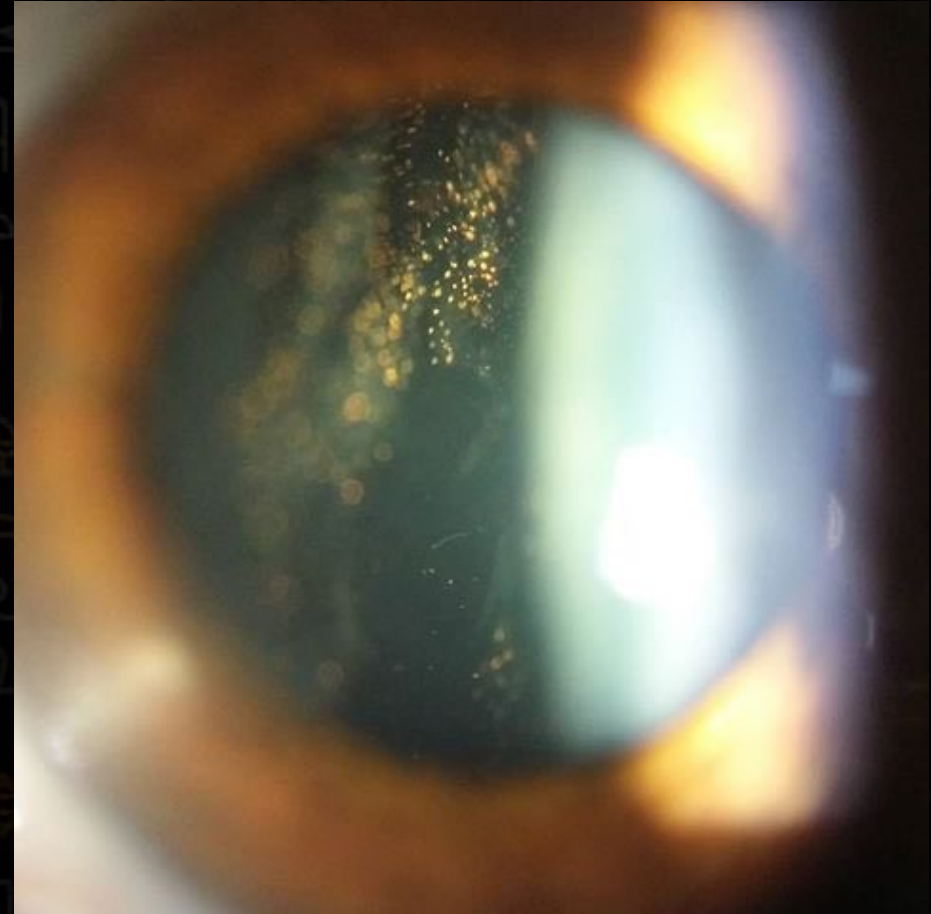
Best Macular Dystrophy

- Brief: An inherited dystrophy where a yellowish, "egg-yolk" (vitelliform) lesion appears in the macula.
- Significance/
Treatment: Characterized by a normal ERG but an abnormal EOG (Arden ratio <1.5). No specific treatment exists; monitoring for CNV is essential.



Tobacco Dust (Shafer's Sign)

- Brief: Tiny, brown pigment granules in the anterior vitreous.
- Significance/Treatment: Highly suggestive of a Retinal Tear or detachment. Dilated fundus exam to confirm and locate the breaks, then managing the rhegmatogenous retinal detachment/tear.

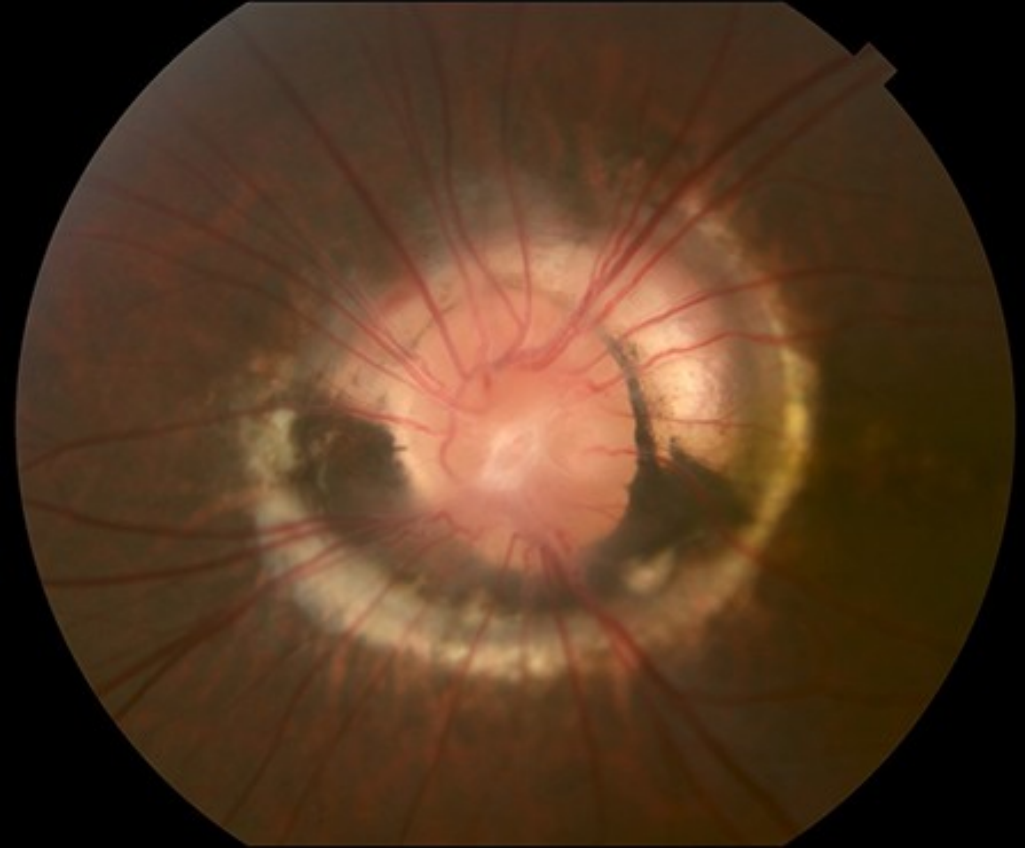


Silicone Oil Removal

- Brief: A surgical procedure to extract silicone oil that was previously injected into the eye as a long-term tamponade for complex retinal detachments.
- Significance/Treatment: Usually performed 3–6 months after the initial surgery to prevent complications like glaucoma or cataracts caused by the oil.

Morning Glory Anomaly

- Brief: A congenital optic nerve deformity where the disc is enlarged and funnel-shaped, surrounded by a ring of pigment, resembling the morning glory flower.
- Significance/Treatment: Often associated with poor vision and increased risk of serous retinal detachment. Patients should be screened for basal encephaloceles (brain defects).



Parks 3-Step Test

- Brief: A clinical algorithm used to identify which extraocular muscle (usually the Superior Oblique) is paretic in cases of vertical diplopia.
- Significance/Treatment: Essential for diagnosing a 4th Nerve Palsy.

See-Saw Nystagmus

- Brief: One eye elevates and intorts while the other eye depresses and extorts.
- Significance/Treatment: Often associated with parasellar lesions (like craniopharyngiomas) or brainstem strokes.

Goldenhar Syndrome

- Brief: Rare congenital defect involving Epibulbar Dermoids (fatty growths on the eye surface), preauricular skin tags, and vertebral anomalies.
- Significance/Treatment: Treatment involves surgical excision of dermoids for cosmetic or visual (astigmatism) reasons.

Bull's Eye Maculopathy

- Brief: A classic retinal finding where a ring of pigment loss (hypopigmentation) surrounds a central darker spot, resembling a target or bull's eye.
- Significance/Treatment: Most famously associated with Hydroxychloroquine (Plaquenil) toxicity, but also seen in Stargardt disease. Significance lies in its irreversibility; once seen, the offending medication must be stopped immediately to prevent further vision loss.

