AIOC 2022: 80th Annual Conference of All India Ophthalmological Society

SUBLUXATED CATARACT MANAGEMENT DURING PHACOEMULSIFICATION

Dr Rajiv Choudhary, Indore

- Surgical management of cataracts associated with zonular dialysis.
- The causes are traumatic, systemic associations, spontaneous and hereditary.
- With recent advances in equipment and instrumentation and a better understanding of fluidics, cataract surgery is safe even in subluxated cataracts.

UNDER PRESSURE! INTRAOCULAR PRESSURE AND INTRAVITREAL ANTI-VEGF INJECTIONS

Dr Nitin Verma, Tasmania, Australia

- Intravitreal injections (IVIs) can cause serious acute and chronic intraocular pressure (IOP) changes in susceptible eyes.
- IVI causes structural changes in the eye.
- The treating physician should keep this in mind as untreated IOP rise can cause damage to the retinal fiber layer.
- Susceptible patients may require closer monitoring and/or earlier consideration of procedural management.
- Challenge: Identifying and monitoring susceptible patients.

GLUE AND DALK IN MICROBIAL KERATITIS

Dr Rajesh Fogla, Hyderabad

Cyanoacrylate glue (isobutyl/isoamyl cyanoacrylate) is used in medical procedures either to close incisions and lacerations without the use of sutures or as an adjunct to strengthen the suturing. This use is possible because it is a bactericidal liquid monomer that, in the presence of small amounts of moisture, rapidly polymerizes to form a strong adhesive.

Therapeutic keratoplasty is necessary when there is no response to maximal medical therapy, rapid progression of infection or tectonic integrity of the eye is compromised (impending perforation or perforation).

Early deep anterior lamellar keratoplasty for fungal keratitis was shown to be poorly responsive to medical treatment.

THE ENCIRCLING SCLERAL BUCKLE

Dr Andrew W Eller, Pittsburgh, US

Three principles of retinal detachment repair

- Localization of the retinal break
- Release the vitreoretinal traction
- Create a chorioretinal adhesion

When do you use an encircling scleral buckle?

- Fast
- Does not require precise localization
- In skilled hands, low-risk
- Inexpensive

The mechanism of a buckle

- Reduces vitreous traction
- Intraocular fluid currents

The surgical technique to apply band

- Selection of encircling element: 240, 41, 42, 4050
- Place approximately 3 mm posterior to muscle insertion
- Belt loops vs. sutures
- Watzke sleeve vs. clove hitch (nylon vs. mersilene vs. polydioxanone)
- Tension-adjust on the pressurized eye to make a "happy band"

POST REFRACTIVE SURGERY SITUATIONS – IOL POWER CALCULATION SIMPLIFIED

Dr Suven Bhattacharjee, Kolkata

- The problems associated with keratometry include laser vision correction (LVC) and radial keratotomy (RK).
- Post-LVC keratometry – directly measure both anterior and posterior corneal curvature and thereby calculate the net corneal power.

- Post-RK eyes – True corneal power can only be estimated by taking into account the small effective optical zone and postoperative hyperopic shift.
- K-reading solutions: *Corneal topography* – the central corneal power, simulated keratometry (SimK) within 1, 2 and 3 mm depending on the instrument. More accurate evaluation of any pre-existing astigmatism; *Scheimpflug photography; Optical coherence tomography (OCT)* – can measure the anterior and posterior corneal powers. The high axial resolution of OCT allows a clear delineation of corneal boundaries.
- The Barrett Suite is a combination of 5 formulas: Barrett Universal II, Barrett Toric, Barrett True K, Barrett TK Universal II and Barrett TK Toric.

MSICS – A MYRIAD OF VARIATIONS

Dr Purvi Bhagat, Ahmedabad

- Important to study and apply variability in techniques.
- Help surgeons learn and perform better.
- Develop manual small-incision cataract surgery (MSICS) training programs accordingly.

WHEN TO AVOID PREMIUM IOLS?

Dr JS Titiyal, New Delhi

- Multifocal intraocular lenses (IOLs) can provide excellent uncorrected visual acuity at all distances. Photic phenomena such as glare and halos are inherent to these lenses.
- Preoperative patient counseling, careful case selection and individualized weighing of benefits and side effects are important.
- Accurate biometry and IOL power calculation are crucial for optimal outcomes.

HOW TO OPERATE A HARD CATARACT?

Dr Harbansh Lal, New Delhi

- Settings and phaco tip.
- Incision-as posterior as possible without cutting the conjunctiva to avoid chemosis.
- CCC-larger particularly nasal and left side for a right-handed surgeon. No hydro initially.
- Wide and deep trench energy used causes no collateral damage.
- Use a high vacuum to hold and do radial rotational split.
- Divide the nucleus into small pieces. Each heminucleus – 4 to 5 pieces.
- Initially long chopper. Away from cornea/viscoat.
- The last fragment – Visco in AC, change chopper, lower the parameters.

SIMULATION TRAINING FOR SICS

Dr Kimaya V Chavan, Mumbai

The HelpMeSee Simulator is the only manual SICS simulator available in the field. It has high fidelity, 3D virtual reality with tactile feedback, and intuitive simulation software.

Advantages of simulation-based surgical training

- Insufficient surgical training during COVID times
- To learn better handling of instruments
- To achieve perfection in a particular step
- Shorten the learning curve
- Reduce surgical complications
- To practice management of complications.

NUCLEUS MANAGEMENT IN THE PRESENCE OF PCR

Dr Anurag Mishra, Cuttack

- **2 Mantras:** The nucleus fragments are not absorbable; Vocal cords put to rest.
- **2 Essential Inclusions in the Inventory:** Dispersive OVD (chondroitin); Multiple IOLs.
- **2 Points to Ponder:** Early recognition/prevent extension; Nucleus emulsification.

NONINFECTIOUS KERATITIS OR WHAT IS WRONG WITH THIS PICTURE?

Dr Sonal Tuli, Gainesville, FL

Exposure keratopathy

- Inferior location
- Minimal discharge
- Whitening around ulceration
- Discomfort and tearing present

Management

- Ointment at night
- Gold weight
- Eyelid surgery if cicatricial
- Tarsorrhaphy
- Moisture goggles

- Bandage contact lens (BCL)
- Plastic wrap in case of burns

Neurotrophic keratitis

- Recurrent unrecognized trauma
- Lack of growth factors
- Decreased tear production
- Toxicity from medications

Treatment

- Lubrication
- Hypertonic saline ointment
- BCL + tarsorrhaphy
- Autologous serum/platelet-rich plasma
- Cenegermin (rNGF) drops.

PRACTICAL PEARLS IN NUCLEUS MANAGEMENT DURING PHACOEMULSIFICATION: CLINICAL CASE SCENARIOS

Dr Ashok Shroff, Mumbai

Phaco procedure

- Only scanty peripheral cortex
- No epinucleus
- No need for hydro
- Routine Phaco-low parameters
- Be careful to avoid PCR.

SETTING UP A PRIVATE PRACTICE

Dr Puneeth Isloor, Shimoga

Where to set up clinic?

Tier 1 city	Tier 2/3
More hard work	Slightly easier
Excellent for pure superspeciality	Difficult to practice pure superspeciality
More money in hand	Lesser money than metros to start with
Marketing is an absolute necessity	Word of mouth works

Bare minimum equipment: Slit lamp, tonometer and biometry, auto-REF/trial set, furniture, autoclave, OT table and chair, microscope and phacomachine, cataract instrument set, linen, drugs, gloves, OT gowns, consumables.

Add-ons for specialties and existing practice: OCT, LASER, fundus photography and FFA-Reina; perimetry, OCT for glaucoma; topography/cross-linking machine/ Rose K lenses/Eye bank-cornea.

Keep bare minimum staff

Tips and Tricks

- Listen to your patient's story with patience.
- Eye contact when you talk.
- Never scold or be curt/rude, no matter how irritable you are. IT MATTERS
- Ask them about themselves or family in brief.
- Pacify patients irritable about waiting time to the best extent possible. Send troublemakers for lunch/ meal while they dilate.
- Prescribe them placebo drops even if not indicated if they hint at wanting it.
- Prescribe that spectacle they insist on having or changing.
- Try to minimize investigations to the bare minimum possible.

DYSPHOTOPSIA

Dr Vikram Jain, New Delhi

Dysphotopsia is an undesirable subjective optical phenomenon after uncomplicated cataract surgery.

- POSITIVE – Streaks, arcs, starbursts
- NEGATIVE – Temporal dark shadow
- MULTIFOCAL – Haloes, rings

There are no objective tests for dysphotopsia, only diagnosed from patient complaints. It is important to distinguish between dysphotopsia and light flashes from retinal vitreous traction or a linear streak from striae in the posterior capsule causing a Maddox rod effect. Positive dysphotopsia is related to bright artefacts of light on the retina, while negative dysphotopsia is manifested by a dark crescent or curved shadow.

Surgical management

- Sulcus piggybacks IOL-disrupts any aberrant light pathways that are casting a shadow.
- Reverse optic capture
- IOL repositioning into sulcus
- Dysphotopsia IOL
- Horizontal IOL positioning.

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