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

CI-DME: ALGORITHMS

Dr Rajiv Raman, Chennai

The guiding principles of treatment of center-involving diabetic macular edema (CI-DME) include:

- Switch anti-VEGF (vascular endothelial growth factor)/switch to laser or steroids in nonresponders. Optical coherence tomography (OCT) and vision are key tests for determining initial treatment choice and follow-up.
- Vitrectomy has a role in cases of vitreomacular traction and select cases of nonresponding DME.
- Classify DME as center involving and center not involving.
- Glycemic control and control of blood pressure (BP), lipids, anemia are crucial.
- Anti-VEGFs are the first-line of treatment for center involving DME.

COMPLEX TRACTIONAL RETINAL DETACHMENTS: DIABETIC AND VASCULITIS

Dr Vishali Gupta, Chandigarh

- Preoperative considerations include good metabolic control, preoperative anti-VEGF agents to reduce intraoperative bleed and preoperative pan-retinal photocoagulation (PRP) in diabetic patients to maintain a safe distance from the base of fibrous membrane. It is important to identify the right plane of dissection.
- Use a cutter that allows working very close to the retina (bevelled, 10,000 cr/min).
- Identify vitreoschisis even though you may feel that vitreous dissection seems apparently complete.

TRAUMATIC SUBLUXATION WITH OR WITHOUT VITREOUS IN AC: WHEN AND HOW TO INTERVENE?

Dr Siddhartha Ghosh, Kolkata

- Ectopia lentis is displacement or malposition of the crystalline lens of the eye. Most commonly it occurs due to trauma, but can also occur due to ocular and systemic diseases.
- Intervention is required when vision or integrity is affected.
- How to intervene? Need to tackle vitreous first, need to preserve capsular bag as far as possible, judicious implantation of intraocular lens (IOL).

SELECTIVE ENDOTHELIALECTOMY IN PETERS' ANOMALY: LONG-TERM CLINICAL OUTCOMES IN 34 EYES OF 24 CHILDREN

Dr Muralidhar Ramappa, Hyderabad

- Peters' anomaly is the most common anterior segment developmental abnormality and presents with a central or paracentral corneal opacification. It accounts for nearly half of all children born with corneal opacities and is bilateral in 60% to 80%.
- Management of these children involves pharmacological pupillary dilatation, optical iridectomy, rotational corneal autograft, endocapsular cataract extraction, penetrating keratoplasty.
- A retrospective consecutive interventional case series was conducted at LV Prasad Eye Institute in Hyderabad between 2012 and 2020. This study validates the outcomes of Selective Endothelialectomy in Peters' Anomaly (SEPA), a novel and less invasive surgical strategy for the treatment of Peters' anomaly. A significant regression of opacity was seen in 85% with marked improvement in functional vision. This study demonstrated for the first time that SEPA can be used even in cases of keratolenticular adhesion as long as the opacity is not >7 mm or at least half of the peripheral cornea is clear.
- SEPA results are extremely promising and can be an effective surgical alternative to full-thickness penetrating keratoplasty benefiting hundreds of children with Peters' anomaly related blindness worldwide.

ACQUIRED VITELLIFORM LESIONS

Dr Deeksha Katoch, Chandigarh

- Vitelliform lesions can be hereditary or acquired. Hereditary lesions include Best's vitelliform

dystrophy, adult-onset foveomacular vitelliform dystrophy and pattern dystrophy.

- Acquired vitelliform lesions (AVLs) occur in a variety of different clinical entities such as age-related macular degeneration (AMD), central serous choroidopathy or tractional maculopathies. The natural course is biphasic with a period of growth followed by resorption.
- Most patients retain reading vision in at least one eye throughout their lives.
- They share common OCT, fluorescein angiography and fundus autofluorescence (FAF) features regardless of the underlying clinical diagnosis.
- The diagnosis of choroidal neovascularization in the setting of AVLs using fluorescein angiography alone can be challenging.
- Integration of multimodal imaging (OCT, FAF, OCT-A) can help resolve dilemmas in most cases. This can help refine management and avoid unnecessary interventions and follow-ups in such patients.

PROLIFERATIVE DIABETIC RETINOPATHY: MANAGEMENT APPROACH

Dr Pramod S Bhende, Chennai

- Proliferative diabetic retinopathy (PDR) is a proliferative vascular retinopathy seen in diabetics.
- Ocular investigations include wide field fundus photo, fundus fluorescein angiography (FFA)/ widefield FFA, OCT/OCTA, USG B scan. The systemic investigations include fasting blood sugar, postprandial blood sugar, A1c, hemoglobin, lipid profile and BP.
- PDR with DME with no macula-threatening traction, recurrence of neovascularization after a good PRP and partial vitreous hemorrhage preventing completion of PRP with no visible traction are ideal candidates where anti-VEGF may have a role.
- Laser PRP is still a mainstay of treatment for PDR.
- Anti-VEGF can be combined with PRP in eyes with CI-DME and recurrent neovascularization.
- Role of anti-VEGF as monotherapy is still debatable but in advanced diabetic eye, presurgery intravitreal anti-VEGF helps to minimize intraoperative bleeding for more complete removal of fibrovascular proliferation.
- Tractional retinal detachment/Combined retinal detachment are the commonest indications for vitrectomy in PDR.
- Early treatment and good metabolic control give better final outcome. Long-term regular follow-up is essential in these patients.

CSR AND CME

Dr Raju S, Bengaluru

- Central serous retinopathy (CSR) is considered the fourth most common nonsurgical retinopathy associated with fluid leakage.
- Cystoid macular edema (CME) is the most common complication post-cataract surgery.
- Risk factors for CSR include stress, smoking, gastroesophageal reflux disease (GERD), type A personality, hypertension, drugs like corticosteroids, phosphodiesterase-5 inhibitors (sildenafil, tadalafil).
- History can provide clues. A typical CSR case is characterized by middle-age, males, sudden-onset painless, micropsia, positive scotoma, hyperopic glasses, decrease in vision/distortion/central scotoma. Features of CME include painless/slight pain/discomfort, photophobia, previous episodes of history of redness.
- Clinical findings in CME are blunted or irregular foveal light reflex, retinal thickening and/or intraretinal cysts in the foveal region.
- Clinical findings in CSR are neurosensory retinal detachment, pigment epithelial detachment, retinal pigment epithelium mottling and atrophy and subretinal fibrin. Rarely, subretinal lipid or lipofuscinoid flecks also may be seen.
- Early CME is developing <4 months of surgery, late CME is >4 months of surgery, chronic CME persists for >6 months with visual impairment.
- Clinical CME is detectable visual impairment, angiographic and/or biomicroscopic findings. Clinical diagnosis is confirmed by OCT and fluorescein angiography.
- There is no robust support for the use of anti-VEGF treatments in CME. Reserved only for eyes unresponsive to conventional treatment modalities.
- In edema due to infections where immunosuppressive therapy could be detrimental to the resolution of infection, anti-VEGF may have a role.

■■■■