Controversies in Angle Closure Glaucoma Treatment

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Controversies in Angle Closure Glaucoma Treatment

Controversies in AACG Treatment

Controversies in CACG Treatment

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LPI alone Vs LPI & ALPI

ALPI Vs GT after LPI failure

Phaco Vs LPI after AACG abortion
• Conclusions:
1. In eyes with PACG, both iridotomy alone or combined with iridoplasty provide a significant and equivalent reduction in IOP.
2. There is a possible reduction in peripheral anterior synechiae, more so in the iridoplasty group.

ALPI Vs GT after LPI failure

• Conclusions:
• After 1 year, ALPI was associated with higher failure rates and lower IOP reduction compared with Protaglandin therapy in eyes with persistent appositional angle closure and raised IOP after LI.
• Conclusions:

1. Early phaco appeared to be more effective in preventing IOP rise than LPI in patients after abortion of APAC.

2. High presenting IOP of 55 mmHg is an added risk factor for subsequent IOP rise.

3. The optimal timing for performing phaco is yet unclear. It would be optimal to have the phaco done after the eye has become quiet but before the setting in of significant PAS with or without IOP rise.
• **Conclusion:**

• Performed within 1 week in patients with APAC and coexisting cataract, phaco/IOL resulted in lower rate of IOP failure at 2 years compared with LPI.

• AS-OCT or UBM will help in showing the role of the lens in pathogenesis of the ACCG through increased lens volume and the lens vault.
• **Lens vaulting** is the perpendicular distance between the anterior pole of crystalline lens and a horizontal line joining the two sclera spurs on horizontal AS-OCT scans.

• The mean value of lens vaulting in angle closure was $901 \pm 265$ um, and it was $316 \pm 272$ um in normal eyes.

• Intraocular surgery in patients with angle closure is more challenging than regular surgery because of the shallow AC, atonic pupil from the acute attack, and residual corneal edema.
The reviewed studies of lensectomy for treatment of ACG reported that lensectomy, by either ECCE or PHACO, to be potentially safe in the hands of a skilled cataract surgeon.

The complication causing the most frequent concern was 1. The immediate postoperative pressure spike, which occurred in 9–60% of eyes.
2. Corneal edema as endothelial cell damage is common after acute angle closure and elevated IOP.

3. Significant postoperative inflammation was seen in 16--40% of eyes reported in at least four studies.

Controversies in CACG Treatment

- Phaco Vs trab. in medically uncontrolled CACG without cataract
- Phaco. Vs Phacotrab. in medically controlled CACG with cataract
- Phaco. Vs Phacotrab. in medically uncontrolled CACG with cataract
• Conclusions:
  1. Both phaco. and trab. are effective in reducing IOP in medically uncontrolled CACG eyes without cataract.

• 2. Trabe. is more effective than phaco. in reducing dependence on glaucoma drugs, but is associated with more complications.

• 3. Phaco. may be even more favorable in patients who are prone to, or cannot accept, the complications of trab. and mitomycin C. However, in situations where drug reduction is a high priority, trabeculectomy may be more suitable.

• 4. The surgical decision has to be based on individual circumstances and preferences of each patient.
Conclusions:

1. Combined phacotrab. with adjunctive mitomycin C may be marginally more effective than phaco. alone in controlling IOP in medically controlled CACG eyes with coexisting cataract.

2. Combined surgery may be associated with more complications and additional surgery in the postoperative period.

Conclusions:

1. Combined phacotrab. with adjunctive mitomycin C is more effective than phaco. alone in controlling IOP in medically uncontrolled CACG eyes with coexisting cataract.

2. Combined phacotrab. is associated with more postoperative complications.