MANAGING DIFFICULT CATARACT CASES BY SMALL INCISION CATARACT SURGERY
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HOW TO CITE THIS ARTICLE:

ABSTRACT: We studied 28 such cases in last 2 years at our institution & how we could handle such cases like brown cataract, subluxated lens, morgagnion cataract, cataract with uveitis & with previous glaucoma surgery. After struggling with phaco method we could successfully manage all these cases with old popular method SICS. CONCLUSION: PHACO & FAMTO are excellent but in such difficult cases SICS is only solution & it is cheap another advantage of this method is, it is fast & only can overcome such a huge backlog in developing countries like INDIA.

KEYWORDS: Hyper mature cataract, hard cataract, morgagnion cataract.

INTRODUCTION: Cataract surgery is most common surgery performed today, technique like ICCE, ECCE, SICS are getting out dated in front of phaco & famato laser but in difficult cases these old methods are helpful particularly SICS.

FEW OF SUCH CASES:

SUBLUXATED LENS WITH CATARACT: Zonular weakness complicates every step of surgery & poses serious threat in terms of visual outcome. A detailed examination is mandatory for-a-extent of zonular weakness b-presence of vitreous in ant chamber. C-position of lens, USG & OCT. d-fundus examination & B scan in opaque media.

STRATEGIES:

• Incision should be away from area of zonular weakness.
• Use high molecular weight viscoelastic.
• Capsulorrhesis should be initiated in an area away from dialysis.
• Avoidance of excessive fluctuations in AC by controlled paracentesis.
• Gentle hydro dissection to allow unimpeded rotation of nucleus.
• In case of frank ZD, Implantation of capsular ring.

BROWN CATARACTS:

• A-Nucleus size is very large & it is difficult to take out.
• B-protecting endothelium is very important.
• C-absence of red reflex makes capsulorrhesis difficult.
• D-Weak zonules especially when the nucleus is very dense.

STRATEGIES:

• It is preferable to have a large tunnel.
• Viscoelastic should be of moderate molecular weight & dispersive to cover endothelium.
Trypan blue dye to get better contrast during hexis.
Make large capsulorrhesis, it will make nucleus delivery easy.
Nucleus delivery is done either by phacosandwitch or phaco fracture technique.
Large incision should be sutured to prevent astigmatism.

**MORGAGNION CATARACT:**
- A hyper mature cataract becomes white when degenerating cortex reaches hyper osmotic state inside the capsule & draws in fluid; this leaves a very tense capsule & a heavy nucleus that often sinks in gelatinous and fluid cortex.
- Problem is difficult visualisation during capsulorrhesis against white back ground and release of milky cortex with no red reflex.

**STRATEGIES:**
- Trypan blue dye use for better contrast during hexis.
- Good quality visco to protect endothelium.
- Intumescent cataract requires a cohesive viscoelastic to create space and prevent AC shallowing
- Slow and study rhesis of adequate size is performed.

**CATARACT WITH PREVIOUS GLAUCOMA SURGERY:**
- Trabeculectomy whether performed as primary procedure or after medical therapy significantly increases the risk of cataract formation.

**CHALLENGES:**
- Shallow AC, Hypotony, Floppy iris, postoperative bleb failure.
- Post op inflammation & intense anti glaucoma medications.

**STRATEGIES:**
- Good pre op bleb assessment, minimal conjunctival trauma.
- Temporal incision away from bleb, controlled paracentesis.
- Bleb assessment at the end of surgery.
- Good postoperative control of inflammation.

**POST UVEITIC CATARACT:** Cataract development is a very common occurrence in any form of anterior and intermediate uveitis, because of:
1. Recurrence and chronic inflammation,
2. Long term use of corticosteroid therapy.

**CHALLENGES:**
- Small pupil because of posterior synechiae formation.
- Pupillary membrane.
- Increased chances of bleeding intra operatively due to fragile vessels.
- Pre and Postoperative inflammation.
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STRATEGIES:
- Preoperative inflammation period of 3 months or more (with or without steroids)
- Synechiorasis followed by Viscomydrasis (high molecular weight viscoelastics), stretch pupiloplasty and multiple sphercterotomies.
- Precise and gentle maneuvers during surgery
- Good control of postoperative inflammation with judicious use of steroids.

CONCLUSION: Hyper mature and complicated cataracts not only present a surgical challenge in terms of the difficulty in visualizing ocular structures, but they may also be requiring good pre-operative assessment and modification of surgical steps as required. A thoughtful approach to surgery will help ophthalmologists manage these complex cases by MSICS which are tough to manage by phacoemulsification. With good pre-operative evaluation and meticulous surgical techniques it is possible to maintain Quality in Quantity especially in mass cataract surgeries and combating the backlog

REFERENCES:

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