Cortical Clean Up and Polishing
Posterior Capsule

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Use of Irrigation and Aspiration

- For removing soft lens material
- For removing viscoelastics

Importance

- Reduce risk of inflammation
- Reduce risk of IOP elevation
- Less chance of PCO
Cortical removal is important to minimize postoperative inflammation and achieve good centration of the IOL. Cortex should be removed from the periphery to the center in the subincisional area.
Co-Axial hand piece

- Straight tip
- Angled tip
- J-shaped tip

I/A Tip materials
- Metal
- Silicone

Foot Pedal
- Position-1: Irrigation
- Position-2: Irrigation & Aspiration

Phacodynamics
- Vacuum
- AFR
- Irrigation
**Machine parameters**

**Techniques**

- Enter AC with the aspiration port facing up
- Engage the cortical material under the anterior capsule
Techniques

- Hold and sweep tangentially
- Pull the cortical material to the center with low vacuum
- Increase vacuum to aspirate the cortex

Management of sub-incisional cortex

- Bi-manual I/A
- Angled I/A tip or J-tip
- Rotate the IOL after implantation to release residual cortex
Advantage of using Bi-manual

- Safer and easier removal of lens cortex
- Easy to remove the sub-incisional cortex
- Less risk of wound distortion

Capsular Polish

- Reduced aspiration rate and vacuum
- Place port on posterior capsule
- Gentle sweeping
- Avoid lifting the tip when polishing
The capsular rupture occurred more often during the cortical removal than during the phacoemulsification.
The surgeon must avoid fast maneuvers and carefully watch for wrinkles in the posterior capsule indicating that aspiration has engaged the posterior capsule.

If the posterior capsule is torned.

➢ Stabilize the capsule with a Viscoelastic material and then to remove the cortex utilizing a dry technique.
➢ Vitreous presentation may require a minimal anterior vitrectomy, followed by the reinjection of a Viscoelastic material before continuation of cortical removal.
If an anterior capsular tear has extended toward the equator.

➢ It is best to remove the cortex elsewhere before tackling the cortex adjacent to the tear.
➢ In this situation, the surgeon should be fill the bag with a Viscoelastic material and to place a single-piece lens within the bag.

❖ Cortical capsular adhesions may occur.
❖ They may require additional hydrodissection or Viscodissection for cleaving adherent cortex off the equatorial or posterior capsule.
In the face of severe positive pressure, it may be necessary to inflate the capsular bag with a Viscoelastic material and remove the cortex by means of a dry technique with a straight and a curved cannula to through the main incision or a separate stab incision.
When a zonular dialysis is present.
➢ Cortex should not be stripped in the usual radial direction perpendicular to the dialysis, but parallel to the dialysis, which will reduce stress on the remaining intact zonules.
Thank You!