



# Modern ECCE, Phaco to & fro

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## My Golden rules

- Patient selection.
- Decision(s).
- Visualization (operative).
- Where to start?
- When to consult? & who?
- When to convert? & how?



## I. Patient Selection

### History

- Age; (extreme)
  - Infant: uveitis
  - Old: eye and/or systemic co-morbidity, zonular instability
- Occupation; VIPs, trouble maker
- Recommended
- personality



## I. Patient Selection

- Systemic disease; dyspnea
  - Social history; post operative care and hygiene
  - Drugs;
    - Anticoagulant (**recent, INR**)
    - Prostate, stop or not?
- Female???** Urinary dysfunction, renal stone

## Examination

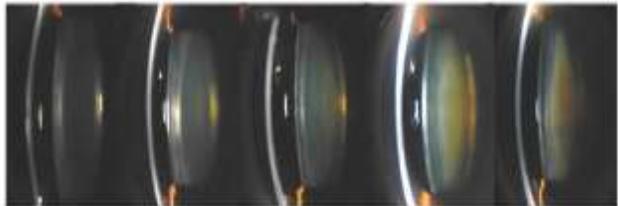
- General examination;  
Kyphosis (special bed),  
tremor (head fixation).
- Supra-orbital ridge, sunken globe.  
(Temporal approach)
- Lid mal-position
- Ocular surface inflammation Vs infection



- Cornea; dystrophies, opacities  
Prognosis vs visualization



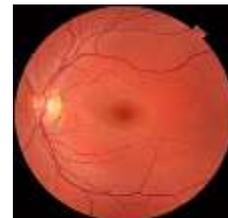
- Before dilatation;  
Rubeosis,  
Pupil reaction,  
Angle,  
Iris itself.



- AC depth

- Density of cataract, optic disc

- Detailed dilated fundus examination  
(Eg, AION, RP, CNV, Scar, Hole, DR, etc)



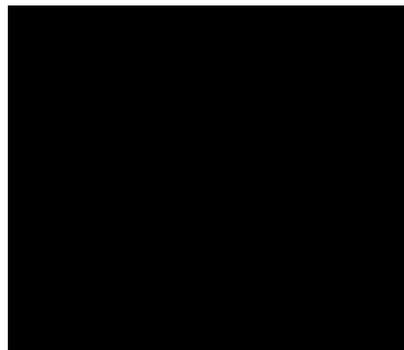
## I. Patient Selection

- To avoid what make surgery is more difficult
- And what make the prognosis guarded



## II. DECISION<sub>(s)</sub>

- To do or not?
- Anesthesia?
- Phaco or ECCE?
- Power of phaco?
- Power, Type of IOL?



## II. DECISION

- Decision taken at the clinic with slit-lamp help rather than OR.
- If any doubt, be safe (easy way is the best).
- Respect the anatomy.
- Respect other eye whatever the circumstances.
- Respect general condition.
- **Is it better for the patient or the surgeon?**

## II. DECISION

- **Types of Anesthesia;**

1. GA,
2. Retro-bulbar,
3. Peri-bulbar & Sub-Tenon,
4. Topical +/- intra-cameral.

N.B. According to ASCRS, 60% TOPICAL

### III. Visualization

- **Surgeon sitting**
  1. Back support
  2. Hand support
  3. Neck extended
  4. Feet and foot pedal
- **Microscopic sitting**
  1. Reset
  2. High magnification
  3. Iris pattern

### III. Visualization

- **Patient sitting(Red reflex)**
  1. Head support
  2. Comfort
  3. Head and/or hand fixation
- **Corneal corrugation** (ant. Vs post. Lip of tunnel)
- **Eye wandering**

## IV. Where to start?

### Retrograde is better

- Aspiration of VES
- I & A of lens matter
- 2<sup>nd</sup> quadrant (in the center)
- Avoid the last, avoid the 1<sup>st</sup>
- IOL implantation
- Hydration
- The groove
- Rhexis, always try.
- A-Z

## IV. How to start?

- **Tunnel and site ports;**
  - Site; posterior with myopia
  - Dimensions; short with myopia

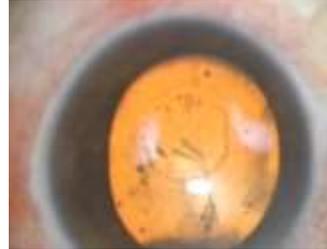
Video pass through



## IV. How to start?

- **Capsulorhexis; RRCS**

- Always try it even before phaco shift
- Needle bent
- start at center to desired diameter
- 3 clock hours



## IV. How to start?

- **Phaco technique:**

- Start with divide and conquer
- Groove depth
- Groove length
- Shift to stop and chop (optional)
- Shift to quick chopping (optional)
- Master all technique
- Take it to the center

## IV. How to start?

- **I & A;**
  - Introduction
  - Engagement
  - Stripping
  - Aspiration

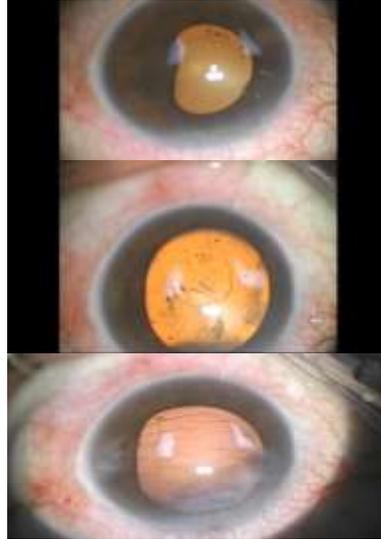


## IV. How to start?

- Keep instruments floating within the site ports
- Keep The AC formed
- Keep calm
- Keep your patient calm
- Keep fluidity of the steps
- Keep Visualization

## V. When to consult? Ask for HELP

- Tunnel
- Capsulorhexis
- Phaco
- I & A
- IOL implantation
- Hydration



## VI. When to convert? & How?

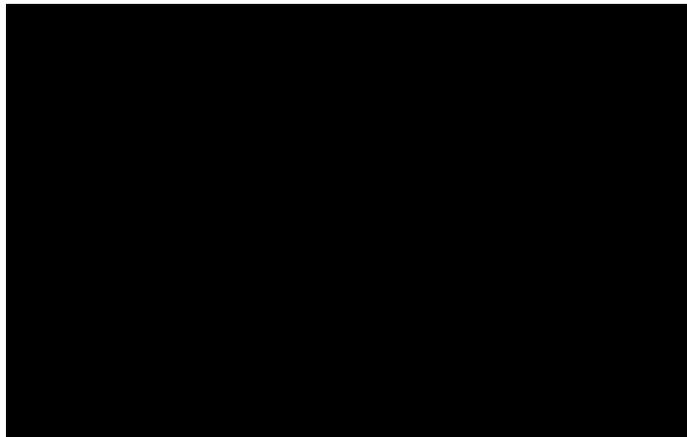
- Tunnel
- Capsulorhexis
- Phacoemulsification
- PCR

## VI. When to convert? & How?

- Keep calm and form the AC
- Separate new well coated section rather than enlarged tunnel
- Release capsulotomy
- Vitrectomy if needed after suturing and not from the tunnel

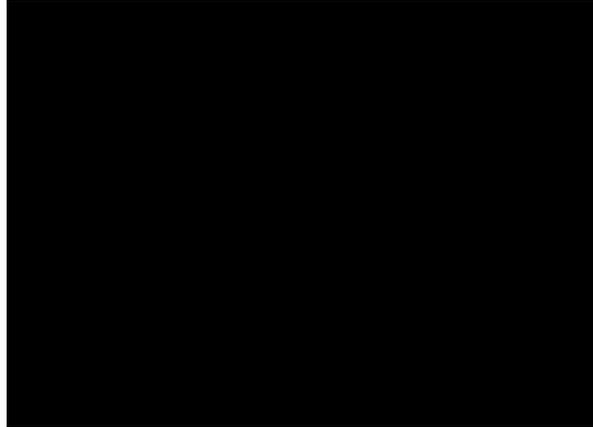
## ECCE

- Clear corneal incision



## ECCE

- Post-SST Modern ECCE



## Conclusion

- ECCE is very important surgical station, but not the last
- Phaco-shift step is mandatory
- Even with best hand, ECCE still has a place in cataract surgery
- think twice, is Phaco better for surgeon or for patient?
- Each man walks in a different way, let us hope that all the ways will lead us to the bagal IOL (ROME).

**THANK YOU**

