



Phaco in small pupil

By

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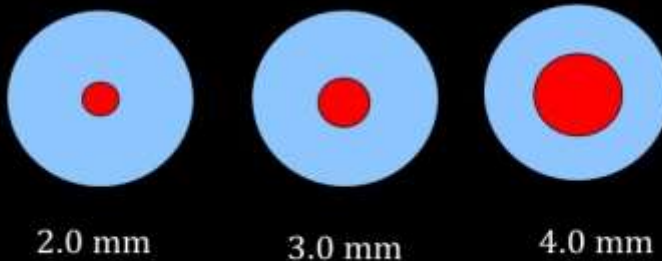
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Small pupil

- Represents a great challenge in phaco surgery.
- It is relative C.I for inexperienced phaco surgeon
- It should be anticipated in the preoperative examination by the dynamic & static methods

SMALL PUPIL ???



Causes of small pupil

Etiology	Mechanism
DM	Metabolic changes & rubeosis
PEX	Iris Dilator & sphincter atrophy
IFIS	Dilator muscle atrophy
Age related	Iris atrophy
Post synechia	Uveitis , ACG , Previous surgery

Technical challenges :

- ↓ red reflex
- ↑ risk of Iris damage & prolapse
- ↓ size of rhexis
- ↑ Risk of residual cortical material
- Inadequate positioning of the in bag IOL

Step-wise approach in management of small pupil

- A. Preoperative : NSAID, Tropicamide, cycloplgia & phenylephrine
- B. Intra operative
 - Interacameral injection of phenylephrine / Adrenaline
 - Viscodilatation
 - Posterior synechiolysis
 - Pupil stretching technique
- A. Pupil expander devices

Preoperative pupillo dilatation



Interacamerar injection of Adrenaline



Viscodilatation



Synechiolysis



Stretching pupil Technique



Phaco in small pupil



Pupil expanders



Phaco in small pupil with Iris hooks



Take home message



Always try to do phaco in even small pupil.



Be patient & always expect the unexpected.

*Thank
you*

