Anesthesia for Microphaco Surgery
The problems and the pitfalls:

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Old ICCE days

- Experience had taught that the safest IOP was ... Essentially 12 scale reading with a 5.5 weight with the Schiotz tonometer.
- The chamber was deep, with no risk of vitreous loss.
ECCE IOP requirements.

- Did not need such a soft eye.
- Chamber maintained was with the use of visco-elastics.
- Still a IOP of 10-12 prior commencing was ideal as an higher pressure led to problems with flat chamber and IOL insertion and even an occasional vitreous show.
Phaco

- An closed chamber system. 16-18 IOP fairly acceptable.
- Giving a retro bulbar or peribulbar block led to stable IOP, with no squeezing of the globe.
- No sudden changes in the A/C depth
Problems with Microphaco with Topical surgery

- When one operates under topical or no anesthesia, the main problem is sometimes the pressure is high in the high especially if the patient squeezes the eye.
- In such cases, the posterior capsule comes up anteriorly and one can produce a posterior capsular rupture.
- To solve this problem, surgeons tend to work more anteriorly, performing supracapsular phacoemulsification.
- The disadvantage of this is that striate keratitis tends to occur.
How to do Microphaco with Topical anesthesia

- Using the air pump, the posterior capsule is pushed back, as if we are operating a patient under a block.
- Surge becomes virtually nonexistent
- Because of the deep chamber, with adequate space between the posterior capsule and the cornea, striate keratitis is negated.
- Squeezing of the eye by the patient is no longer an catastrophe. Peaceful surgeon, well deepened chamber, equates to good surgery.