COST EFFECTIVE PHAKOEMULSIFICATION

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Phako emulsification as we are all aware, is a procedure which is quite expensive not only for the patients but also for us Surgeons. It involves first of all an investment in the machine itself. Once we have managed to get ourselves a machine there are also recurring costs involved:

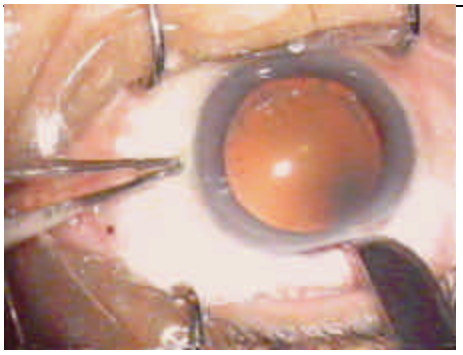
1.The Blades used for the tunnel
2.Irrigating fluid – best being BSS which also happens to be expensive
3.Visco elastic substance
4.The phako Tips need to be replaced since they get blunt after a certain no. of cases.
5.The handpiece itself after a period of time wears off and needs to be replaced which again means shelling out a huge sum
6.The tubings after repeated autoclaving work less efficiently and hence require to be replaced.

The replacement of the tips,handpiece and tubings of course is required after many cases and has to be done as and when required. But the small incision blades, the irrigating fluid and the vis-coelastic that we use are fresh for almost every case. This is where we can attempt at lowering the cost and at the same time not compromise on the patients eye or his vision.

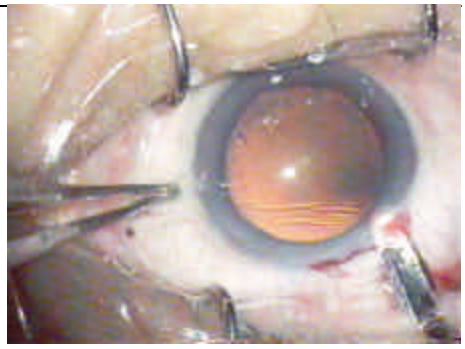
This is how I do a cost effective phako.
· Topical Anaesthesia is used
· A 15 no. Bard Parker blade is used to make an initial groove at the limbus
· A Steel crescent knife which can be attached to an autoclavable handle is used for lamellar dissection
· The capsullorrhexis is done with a bent 26 G disposable needle and is attached to the irrigation tubing of the phako unit thus ensuring a closed chamber rhexis.
· I use Ringer lactate in a glass bottle which is autoclaved the previous day and I add Gentamycin and Adrenaline ½ cc each to the bottle.
· The side port entry is made with a simple 20 G disposable needle.
· The Anterior chamber is formed with the Ringerlactate solution through the side port.
· A steel Keratome is used to enter the AC the size depending on the size of the tip.
· Methylcellulose 2% is used to form the chamber before hydrodissection.
· Hydrodissection done with a healon cannula which has been autoclaved and used
· Then the actual phako emulsification is done here I use a sharp tip chopper
· Methycellulose is used to form the chamber and the other side port entry is made through the same site as the capsulorrhexis site with the same 20 G disposable needle.
· Bimanual I/A is done and cortex removed
· The incision is extended to 5 mm with the same keratome that I used earlier
· A 5mm Intraocular lens is inserted
· If I am inserting a foldable lens I don't extend the incision The foldable lens is inserted
· The methylcellulose is removed and replaced by ringerlactate
· The entry sites are hydrated and the procedure is complete.

To summarize the use of the following-
1. Steel blades which can be mounted on autoclavable handles
2. 20G needle for side port entry
3. Minimal use of viscoelastic (before hydrodissection, before I/A and before IOL insertion)
4. Ringerlactate in glass bottle helps in reducing the recurring costs at the same time at no stage is there a compromise on patients eye or vision or on sterility.
I am of the opinion that One Must not compromise on the machine because of the cost factor but one can adopt a few simple measures to make our procedure "cost effective".

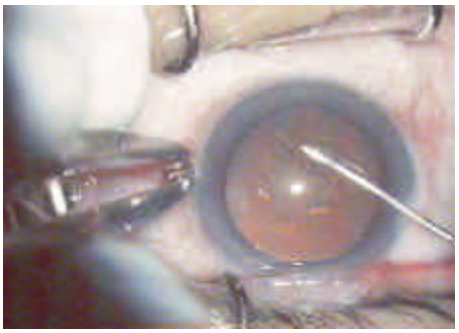
Many look, but few see.
Maxwell M. Wintrobe, 1980



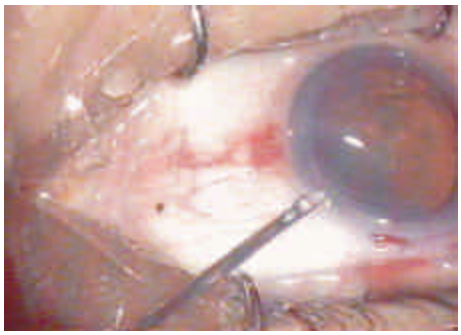
Initial groove with 15 No. BP blade



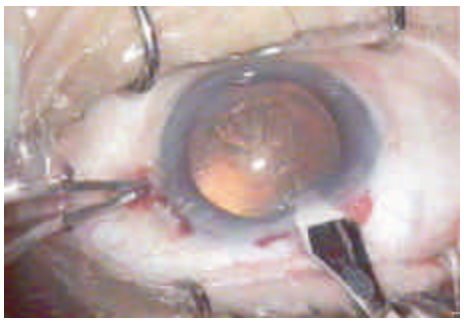
Corneal tunnel made with steel crescent blade



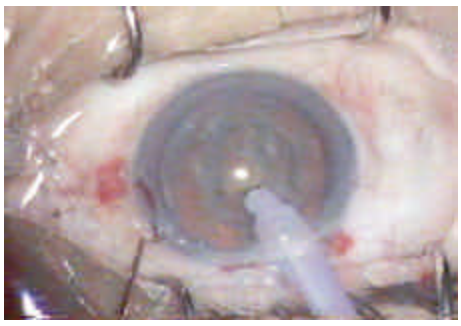
Closed chamber Capsulorrhexis with 26 G needle



Side port entry with a 20 G disposable needle



Anterior chamber entry with 3.2 mm steel keratome



Phakoemulsification