SWOLLEN LENS CHALLENGE

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Preoperative IV mannitol

Heavy Healon

Brazilian technique for prevention of the Argentinean flag sign in white cataract

Carlos G. Figueiredo, MD; Julio Figueiredo, MD; Gabriel R. Figueiredo, MS
If life was easy
where would all the
adventures
be?

REFERENCE
1. Figueiredo CG, Figueiredo J, Figueiredo GB. Brazilian technique
   for prevention of the Argentinean flag sign in white cataract.
   J Cataract Refract Surg 2012; 38:1531–1536

Figueiredo et al. describe their technique to prevent
the dreaded Argentinean flag phenomenon in white
cataracts. The problem that often occurs is that within
a few seconds of the stained anterior capsule being
punctured, the high intralenticular pressure expands
the initial capsule incision in an uncontrolled
way with the development of the Argentinean flag sign.
Instead of allowing the higher intralenticular pressure
to passively equilibrate with the pressure in the ante-
rior chamber, the pressure within the lens should be
actively reduced. We have found the following technique
useful in achieving this.
lenticular pressure. The 25-gauge needle is then introduced into the anterior chamber through the main incision, parallel to the incision and with the bevel down, facing the anterior capsule. The needle is inserted into the lens near the central dimpling. As soon as the entire opening of the needle has entered the lens, liquid cortex is aspirated by pulling back on the syringe plunger. This immediately reduces the pressure within the lens, reducing the risk for the Argentinean flag phenomenon. The bevel of the needle must face
Lens decompression technique for prevention of intraoperative complications during phacoemulsification of intumescent cataract

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Purpose: To evaluate intraoperative complications during phacoemulsification of intumescent cataract using lens decompression technique. Methods: Patients with intumescent cataract scheduled for phacoemulsification were randomized and divided into two groups. In both groups, after the anterior capsule was stained with trypan blue, the anterior chamber was filled peripherally with a dispersive ophthalmic viscosurgical device (IVD) followed anteriorly by a higher viscosity cohesive OVD (Ualen Ovo). In Group 1, a 25-gauge needle was then inserted into the lens center and liquid vitreous aspirated by pulling back on the syringe plunger. The surgeries measured were the incidence of capsular radial tears and the incidence of conversion to extracapsular cataract extraction (ECCE). Results: In Group 1 (28 eyes), capsular radial tears occurred in four eyes, and in two eyes, the procedure had to be converted to ECCE. In Group 2 (28 eyes), no capsular radial tears or conversion to ECCE was reported. Conclusion: Lens decompression technique reduced the risk of capsular radial tears and conversion to ECCE during phacoemulsification of intumescent cataract.

Key words: Intumescent cataract, lens decompression, liquefied cortex, phacoemulsification, radial capsular tear