Supplementary Online Content


eAppendix. Surgical procedure and main outcome measures.

This supplementary material has been provided by the authors to give readers additional information about their work.
eAppendix

Surgical Procedure
Patients received subtenon anaesthesia in 75% of eyes (n=39) and retrobulbar anaesthesia in 25% of eyes (n=13). A 2.2 mm, self-sealing clear corneal incision was made on the 12 o’clock position. The soft shell technique, which combines the dispersive viscoelastic Viscoat (sodium hyaluronate 3.0%-chondroitin 4.0%, Alcon Laboratories, Fort Worth, Texas) with the cohesive viscoelastic Provisc (sodium hyaluronate 1.0%, Alcon Laboratories, Fort Worth, Texas), was used to stabilise the anterior chamber and protect the corneal endothelium. A 5.5 mm capsulorrhexis was created, and hydrodelineation and hydrodissection were accomplished with a stream of balanced salt solution (BSS) from a 27-gauge cannula. Bottle height was the same in both groups (80 and 100 cm H2O in sculpt and quadrant removal mode, respectively). Settings for quadrant removal in the longitudinal mode were: surgeon-controlled ultrasound power with a ceiling of 60% (linear), with a pulse frequency of 30 pulses per second, and a duty cycle of 40%. In the torsional mode settings were 100% torsional continuous linear. In both groups, the aspiration flow rate was set at 28 cc per minute and the vacuum limit at 350 mm Hg. After phacoemulsification, a monofocal IOL (AcrySof SN60WF, Alcon, Fort Worth, Texas) was inserted in the bag using the Monarch III IOL Delivery System with a D cartridge (Alcon, Fort Worth, Texas).

Main Outcome Measures
We tried to measure endothelial cell density (ECD) counts using the NonCon Robo SP-9000 non-contact specular microscope (Konan Medical Inc., Hyogo, Japan) preoperatively, and at 3 and 6 months postoperatively. However, due to corneal guttace reliable ECD measurements, i.e. three consecutive endothelial images of the central cornea were required. ECD counts could only be obtained in 2 eyes in the longitudinal group and 3 eyes in the torsional group. Therefore, we decided not to mention these results in the manuscript. All patients had confluent guttae on specular microscopy, which made ECD counts impossible. Except for the 5 mentioned eyes, they showed some spread-out guttae in the photographed area (ECD range 1597-2359 cells/mm²).