( ) R1 ( ) R2 ( ) R3 ( ) PG0 (X) PG1 ( ) Estagiário ( ) Tecnólogo ( )
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Service (sector) Cataract Nº CEP

Comparative study between co-axial phacoemulsification and MICs: one year follow up.

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Comparative study between co-axial phacoemulsification and MICs: one year follow up. PURPOSE: To evaluate the amount of ultrasound (US) used, the best corrected visual acuity (BCVA), the induced corneal astigmatism (ICA), and the corneal endothelial cell loss, in bi-manual micro-incision cataract surgery (MICs); and to compare the results with co-axial phacoemulsification. METHODS: A prospective randomized study including 30 patients (60 eyes) with bilateral cataract; each patient had one eye submitted to co-axial phacoemulsification, group 1 (30 eyes); and to MICs, group 2 (30 eyes), in the fellow eye. The US time and the average US power were measured intraoperativelly in both groups. The BCVA, the ICA, and the central endothelial cell loss were evaluated in both groups with a follow up of one year. The results were compared between both groups. RESULTS: The total US time was higher in group 1 (0.50 and 0.82min) and the US average power was similar in both groups (10.1 and 10.0%). The BCVA were similar in both groups from 24 hours to 1 year; the ICA were 0.29 e –0.02 in 15 days, 0.64 e 0.52 in 3 months, and 0.25 e 0.14 in 1 year in group 1 and 2; and the central corneal endothelial cell loss were of 4.66% and 4.45% in three months, and of 6.00% and 8.82% in one year in group 1 and 2. There was significant difference between the post-operative results in both groups only in central endothelial cell loss in one year. CONCLUSIONS: The study showed more US time in MICs and the same US average power in both groups. The BCVA had the same behavior in both groups; the ICA was non significant and with no difference between both groups. And it showed more central endothelial cell loss in MICs, than in co-axial phacoemulsification in one year follow up. Study aproved by the Medical Ethic Comitee – São Paulo Hospital/UNIFESP (CEP n0 0528/02. All patients signed an informed consent to begin the study.