Simultaneous bilateral vs sequential bilateral cataract surgery

Cataract extraction is now the most common surgery performed in the world, and demand is expected to continue to increase with the ageing population in the developed world and better access to care in the developing world. The economics favour the idea of simultaneous bilateral surgery, but is this approach as safe as the standard sequential approach? The Helsinki Simultaneous Bilateral Cataract Surgery Study evaluated the refractive outcomes, complication rates, and changes in patients’ functional state and satisfaction with simultaneous compared with sequential bilateral cataract surgery. In this study 493 (247 patients) had bilateral surgery in one session and 506 (257 patients) in separate sessions. The postoperative refraction was within ±0.50 dioptre of the target in 67.2 per cent of eyes in the study group and 69.2 per cent of eyes in the control group and within ±1.00 D in 91.0 per cent and 90.3 per cent, respectively (P<.92). The only complication that affected postoperative visual acuity was chronic cystoid macular oedema, which occurred in one eye in the study group (0.2 per cent) and in two eyes (0.4 per cent) of one patient in the control group (P=.57). Ninety-five per cent of patients in both groups reported being very satisfied with surgery. When planning simultaneous bilateral cataract surgery, the major concerns include the risk for endophthalmitis, corneal oedema, and CME, as well as for retinal detachment in patients with high axial myopia. In the present study, those concerns were taken into consideration by using appropriate inclusion criteria for enrolment. Staff also received additional training on endophthalmitis prevention. Therefore, while this study suggests no difference in outcomes between the two approaches, the results cannot be extrapolated to patients who would not fulfill the inclusion criteria used in this study, the researchers note.


Vision quality after LASEK

How good is patients’ quality of vision after laser-assisted subepithelial keratectomy (LASEK)? A study employing the Quality of Vision (QoV) questionnaire indicated that the quality of vision worsened in the early postoperative period but returned to preoperative levels after one month and was better than preoperative levels by three months. The researchers note that quality of vision may be largely governed by epithelial cover, which usually occurs within three to seven days of surgery, but may take as long as two weeks. This may contribute to the high QoV scores in the early postoperative period. These findings may also be attributable to general wound healing, tear-film disruption, and the use of topical medication.


Comparing PCO rates

How do single-piece hydrophobic acrylic IOLs compare with single-piece hydrophilic acrylic IOLs with a 360-degree square edge in terms of PCO formation? Vasavada and colleagues conducted a prospective randomised clinical trial comparing PCO rates three years postoperatively in contralateral eyes with a single-piece hydrophobic acrylic (AcrySof, Alcon) and one of two single-piece hydrophilic acrylic intraocular lenses (Akreos Adapt or C-flex). Although there was no significant difference at one month, the median EPCO score was statistically significantly lower in the hydrophobic group than in hydrophilic groups at three years. Nine eyes in hydrophilic groups required Nd:YAG capsulotomy, while no eye in the hydrophobic group required a capsulotomy.