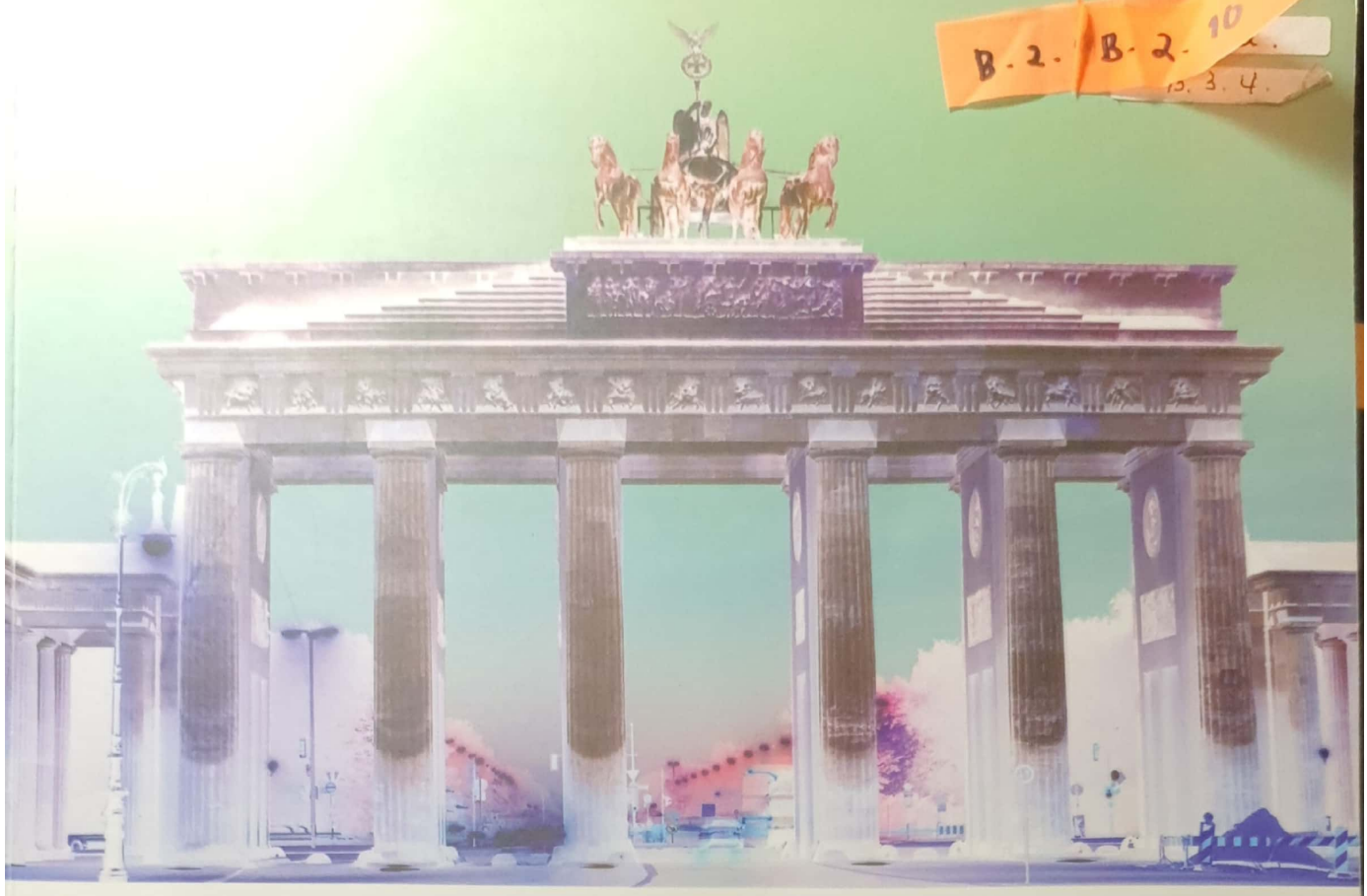


13 – 17 September

BERLIN 2008

XXVI Congress of the ESCRS

Book of Abstracts

EUROPEAN SOCIETY OF CATARACT & REFRACTIVE SURGEONS

Contents

FREE PAPERS

SHIMIZU, KIMIYA

VISUAL PERFORMANCE OF PSEUDOPHAKIC MONOVISION VERSUS MULTIFOCAL IOLS

K. Shimizu, M. Ito
Kitasato University Hospital, Sagamihara, Kanagawa, Japan

PURPOSE: Monovision is an optical technique for correcting presbyopia, in which dominant eye is corrected for distance vision and non-dominant eye for near vision. Since 1999, we have been using this method after cataract surgery. We assessed the visual performance of pseudophakic monovision and bilateral implantation of multifocal IOLs.
SETTING: Department of Ophthalmology, Kitasato University Hospital, Sagamihara, Kanagawa, Japan.
METHODS: We examined 82 subjects (age: 49-87 years) with pseudophakic monovision using monofocal intraocular lenses (IOLs) and 22 subjects (age: 54-88 years) with bilateral implantation of refractive multifocal IOLs (Array SA40N, AMO Co.). In pseudophakic monovision, dominant eye was determined by the hole in the card test. The target refraction was emmetropia in the dominant eye, whereas it was -2 diopters in the non-dominant eye. In multifocal IOLs, the refractive target for each eye was emmetropia. Visual acuity at various distances, contrast sensitivity, near stereopsis, and spectacle independence were measured.
RESULTS: In pseudophakic monovision, the mean difference in spherical equivalent (SE) refractive error between both eyes was 2.27 diopters (range: 1.75-2.75 diopters). In multifocal IOLs, SE refractive error was +0.14 diopters (range: -0.5/+0.5 diopters). The binocular visual acuity of pseudophakic monovision subjects (20/25) was better than that of multifocal IOLs (20/33) at near distance. In both groups, binocular summation was observed at 1.5 to 6 cycles / degree for contrast sensitivity, and near stereopsis was in the normal range. Moreover, spectacle independence was lower in subjects with pseudophakic monovision (23%) than in those with multifocal IOLs (34%).
CONCLUSIONS: Pseudophakic monovision is an effective approach for managing loss of accommodation after cataract surgery; however, careful selection needs to be done. A new technique called "customized monovision by multifocal IOLs" also provides better results in such patients. In addition, various IOLs are expected to enhance the diversity of monovision.

SHROFF, NOSHIR

TORSIONAL PHACOEMULSIFICATION VERSUS LONGITUDINAL PHACOEMULSIFICATION FOR EMULSIFYING BRUNESCENT CATARACTS IN INDIAN EYES

N. Shroff, R. Dutta, N. Verma
Cataract & Intraocular Lens Implantation Service, Shroff Eye Centre, New Delhi, India

PURPOSE: To evaluate the safety profile, effectiveness and visual outcome of torsional phacoemulsification versus longitudinal phacoemulsification in brunescent cataracts in Indian eyes.
SETTING: Cataract & Intraocular Lens Implantation Service, Shroff Eye Centre, New Delhi, India.
METHODS: 35 eyes with nuclear sclerosis grade 4+, endothelial cell density > 1800/mm2, with no other anterior or posterior segment pathology underwent phacoemulsification utilizing continuous torsional phacoemulsification mode with 0.9 mm 45° Kelman tip (Alcon Infiniti) for 18 eyes and longitudinal phacoemulsification mode (Sovereign WhiteStar ICE) for 17 eyes. Intra-operative parameters studied were Cumulative Dissipated Energy (CDE), volume of irrigating fluid, incidence of wound burn, followability of nuclear fragments and chamber stability. All eyes were examined postoperatively at day-1, day-7, and day-30 for central corneal thickness (CCT), anterior chamber reaction and Best corrected visual acuity (BCVA). Endothelial cell density (ECD) with specular biomicroscopy was done at day-30.
RESULTS: Both groups were matched for age and preoperative ECD. Mean CDE was 26.53 ± 9.26 and 22.52 ± 10.71 for longitudinal and torsional groups respectively (p>0.05). The mean volume of irrigating fluid used was 162.15 ± 22.35mL and 114.23 ± 32.41 ml for longitudinal and torsional groups respectively (p< 0.05). LogMAR BCVA on day 1 & 7 was 0.37 ± 0.15 and 0.27 ± 0.12 in the longitudinal group and 0.20 ± 0.16 and 0.11 ± 0.12 in the torsional group respectively (p<0.05). CCT on days 1 and 7 were 608.35 ± 61.36µ and 590.53 ± 48.48µ in the longitudinal group and 570.17 ± 26.92µ in the torsional group respectively (p<0.05). ECD was 2101.53 ± 37.78µ and 537.16 ± 30.29µ in the longitudinal and torsional groups respectively (p>0.05).
CONCLUSIONS: Both techniques provide comparable long-term outcomes. However, torsional phacoemulsification offers an advantage over longitudinal phacoemulsification with respect to earlier corneal rehabilitation, and significantly lesser endothelial cell loss. Also, due to its use, superior magnetic followability at lower vacuums and flow rates, and stability decreases the potential for complications in eyes with brunescent cataracts.

SIMANJUNTAK, GILBERT W.S.

DOUBLE EXTRA SHARP CHOPPER INCREASE EFFICACY & SAFETY PHACOEMULSIFICATION FOR HARD MATURE CATARACT

G.W.S Simanjuntak, J.E. Tan, H.H.B. Mailangkay
1. Christian University Of Indonesia, Jakarta, Indonesia
2. Cikini CCI Hospital, Jakarta, Indonesia

PURPOSE: To assess the efficacy and safety of a modified double chopper for removal of hard cataract.
SETTING: Department of Ophthalmology, Christian University of Indonesia/Cikini Church Hospital, Jakarta, Indonesia.
METHODS: The study design was prospective non-comparative interventional clinical study. Forty eyes of 25 patients with hard mature cataract (grade 4) underwent phacoemulsification by single surgeon and analyzed. The (grade 4 as the hardest). The pre-modified Koch chopper was sharpened under slit lamp to become extra sharp at the tip and inside edge. The knife, 2 mm in length.
RESULTS: The mean effective phaco time was 23.73 + 5.75 seconds. power was facilitated by using horizontal chopping using self made extra sharp chopper. No resistance encountered while moving the nucleus instead of cataract persistency. Preoperative BCVA were finger counting (47%), hand movement (35%) and light perception (18%). Postoperative day 1and day 7 were 0.57and 0.95 respectively. There is no difference effective phaco time among nuclear hardness (P=0.467) which represents effectiveness of the extra sharp chopper.
CONCLUSIONS: Double extra sharp chopper can facilitate a safe and rapid rehabilitation, and maximal subject comfort when doing phacoemulsification with old machine for hard mature cataract.

SIMON, GABRIEL

A WIRELESS, IMPLANTABLE INTRA-OCULAR PRESSURE SENSOR FOR THE MANAGEMENT OF GLAUCOMA

G. Simon[1], P. Irazoqui[2], J. Clevenger[3]
1. Instituto Gabriel Simon Oftalmologia, Madrid, Spain
2. Purdue University, West Lafayette, IN, USA
3. SOLX, Inc., Waltham, MA, USA

PURPOSE: To evaluate the in-vivo performance of a novel intra-ocular pressure sensor for the management of glaucoma.
SETTING: Purdue University, West Lafayette, IN, USA; Instituto Gabriel Oftalmologica, Madrid, Spain.
METHODS: A wireless, implantable pressure sensor has been developed monitoring elevated Intra-Ocular Pressure (IOP) associated with glaucoma. The minimally-invasive pressure sensor records continuous IOP data via a daily wireless recharge and upload to an external unit. The device is 3mm by 5mm, with a height of 200 microns, and is designed to be placed into the suprachoroidal space. The sensor and associated electronics are enclosed in a hermetically-sealed package, which is contoured to accept the curvature of the eye surface. In this initial investigation, ten rabbits were implanted for safety analysis, followed by a clinical pilot study.
RESULTS: Following implantation, the IOP sensor demonstrated accurate, consistent IOP measurements to within ±0.5mmHg, without significant drift. Due to the sensor surface residing on the choroid, the device required no calibration upon implantation to properly measure IOP. The device was

POSTERS

result was obtained in all of the eyes.
CONCLUSIONS: Safety and high efficacy of TPA in the treatment of fibrinous membranes after cataract surgery are confirmed.

SIGNER, THEO

EFFECTIVENESS OF THE ACRYSOF TORIC LENS IN REDUCING POSTOPERATIVE ASTIGMATISM AFTER CATARACT SURGERY

T. Signer
Vista Klinik, Binningen, Switzerland

PURPOSE: To determine the effectiveness of the AcrySof Toric lens as measured by the postoperative astigmatism reduction.
SETTING: Vista Klinik, Binningen, Switzerland.
METHODS: Thirty-nine eyes of 30 patients (corneal astigmatism from 1.14D to 6.32D) were implanted with an AcrySof Toric IOL model T3, T4 or T5 in accordance with the manufacture's calculator. Patients underwent routine cataract surgery via phacoemulsification. Postoperative measures including corneal cylinder, refractive cylinder, lens rotation and UCVA were taken 1- and 3-months postoperatively. Additionally a patient questionnaire assessing spectacle use and satisfaction was conducted 3-months postoperatively.
RESULTS: Mean preoperative corneal cylinder was 2.23+1.12 D. This mean was maintained postoperatively whereas refractive cylinder was 0.61+0.62 D at both the 1- and 3-month visits (1.62 D change from preop). Between the visits <2o of rotation was noted in 85% of patients. UCVA was 0.8 or better in 74% of patients 1-month postoperatively and 0.6 or better in 88% of patients 3-months postoperatively. According to the questionnaire, 77% of patients were completely satisfied (10 on 10-point scale) and 89% of patients were spectacle free for distance vision.
CONCLUSIONS: The AcrySof Toric IOL is stable and significantly lowers astigmatism resulting in a high percentage of distance spectacle freedom and patient satisfaction.

SIMANJUNTAK, GILBERT W.S.

SECONDARY LENS IMPLANTATION AFTER EVENTFUL CATARACT SURGERY

G.W.S Simanjuntak, J.F. Tan, H. Hasibuan, J. Wijaya
1. Christian University Of Indonesia, Jakarta, Indonesia
2. Cikini CCI Hospital, Jakarta, Indonesia

PURPOSE: To report the outcomes of secondary lens implantation in tertiary eye clinic in Jakarta.
METHODS: Retrospective study of cases with secondary implant as a single or combined with other procedure. All cases underwent eventful cataract surgery with or without lens implantation in anterior chamber. Possibilities of IOL placed in the sulcus evaluated thoroughly preoperatively. All secondary implantation done in the sulcus. Preoperative VA, IOP and significant findings recorded, as well as postoperatively.
RESULTS: Subjects were 8 cases with history of eventful cataract surgery. There were 4 cases with anterior chamber lens implantation with secondary glaucoma, uveitis and vitreous opacities. There were 2 cases with posterior chamber decentered lens with impending posterior dropped IOL, and aphakic were 2 cases. All cases with posterior capsule rupture. Posterior synechiae seen in cases of AC IOL and aphakia. Surgical technique demonstrated by video.
CONCLUSIONS: Preoperative thorough evalution along with proper surgical technique can solve problem of patient with improper lens implantation.

SIMON, GABRIEL

A PHOTO-TITRATABLE GOLD SHUNT TO CONTROL ELEVATED INTRAOCULAR PRESSURE ASSOCIATED WITH GLAUCOMA

G. Simon[1], J. Clevenger[2], J. Lowery[2], J. Lin[2]
1. Instituto Gabriel Simon Oftalmologia, Madrid, Spain
2. SOLX, Inc., Waltham, MA, USA

PURPOSE: To evaluate the safety and efficacy of a photo-titratable Gold Shunt glaucoma drainage device in a pilot study.
SETTING: Instituto Gabriel Simon Oftalmologia, Madrid, Spain.
METHODS: The Gold Shunt (SOLX, Waltham, MA), a glaucoma drainage device made entirely from medical grade gold, was modified to allow for post-operative photo-titration with a Ti-Sapph trabeculoplasty laser (SOLX, Waltham, MA). The device reduces intraocular pressure (IOP) by establishing flow from the anterior chamber into the suprachoroidal space. In an early pilot study, 7 eyes in 7 patients diagnosed with primary open angle glaucoma received the photo-titratable Gold Shunt, with one patient requiring post-operaitve photo-titration.
RESULTS: Mean IOP+SD at baseline was 20.6 (3.6)mmHg on 2.28 (0.49) glaucoma medications. Average IOP was 7.9 (6.6)mmHg at 1 day, 8.6 (3.5)mmHg at 1 week, 16.5 (6.8)mmHg at 4 weeks, and 17.5 (4.9)mmHg at 12 weeks of follow-up. Average IOP medications at 12 weeks was 1(0.0). One patient had a pre-op IOP of 18mmHg while on three glaucoma medications, which spiked to 32mmHg at week four. Four channels were titrated with the Ti-Sapph during this visit, using 50mJ of energy for each. IOP was lowered to 18mmHg four hours post-operatively. At 8 weeks, IOP was further reduced to 16mmHg.
CONCLUSIONS: Initial studies with the photo-titratable Gold Shunt device indicate that post-operative outflow modulation can be performed to adjust for changing IOP conditions. Additional studies are necessary to establish full safety and efficacy trends for this novel treatment.
FINANCIAL DISCLOSURE: J. Clevenger, J. Lowery, and J. Lin are all employees of SOLX.

SIMSEK, SABAN

A NEW SUTURING TECHNIQUE FOR IRIS FIXATION IOLS

S. Simsek, H.B. Cakmak, N. Cagil, H. Simavli
Ankara Ataturk Research And Training Hospital, First Ophthalmology Department, Ankara, Turkey

PURPOSE: To present a new suturing technique for iris fixation to implant posterior chamber IOL in patients without capsular support.
SETTING: Ankara Ataturk Research and Training Hospital, First Ophthalmology Department, Ankara, Turkey.
METHODS: Three aphakic patients who had no capsular support were included in this study. A 6.5 mm corneoscleral incision in superior quadrant, and a corneal paracentesis at 6 o'clock were performed. After viscoelastic injection, a 10-0 curved prolene suture needle was inserted through paracentesis and peripheral iris to posterior chamber, and through pupillary space into anterior chamber, and it was exited from superior incision. Then, the same needle was inserted through superior incision, and exited from inferior incision following the same route. The second needle was inserted from superior incision and superior peripheral iris to posterior chamber. Through pupillary space the needle exited from inferior incision, and returned to superior incision following the same route. 1 mm space was left between two needle passes on iris. Each formed suture loop was cut outside, and cut ends were tied to IOL haptic. IOL was implanted into posterior chamber and free ends of sutures were tied onto iris at each side.
RESULTS: No significant peroperative and postoperative complication occured in any case, except mild pupil stretching because of improper IOL size. Implantation of IOL was observed to be easier and less traumatic than similar methods. Postoperative astigmatism was below 2 diopters and spherical equivalent of refractive errors was within 1.50 diopters in all cases. Increase in visual acuity was obtained in all cases.
CONCLUSIONS: This new method appears to be both effective and safe in aphakic cases without any capsular support. Further clinical studies with more cases and with a specially designed IOL will determine clinical significance of this new technique.

SECONDARY LENS IMPLANTATION AFTER EVENTFUL CATARACT SURGERY

Gilbert WS Simanjuntak, Jannes F Tan, Helario Hasibuan, Jusuf Wijaya
Cikini Eye Institute/Cikini Hospital, Jakarta
Department of Ophthalmology FK-UKI, Jakarta

Purpose : To report the outcomes of secondary lens implantation in tertiary eye clinic in Jakarta.
Method : Retrospective study of cases with secondary implant as a single or combined with other procedure. All cases underwent eventful cataract surgery with or without lens implantation in anterior chamber. Possibilities of IOL placed in the sulcus evaluated thoroughly preoperatively. All secondary implantation done in the sulcus. Preoperative VA, IOP and significant findings recorded, as well as postoperatively.
Result : Subjects were 8 cases with history of eventful cataract surgery. There were 4 cases with anterior chamber lens implantation with secondary glaucoma, uveitis and vitreous opacities. There were 2 cases with posterior chamber decentered lens with impending posterior dropped IOL, and aphakic were 2 cases. All cases with posterior capsule rupture. Synechiae posterior seen in cases of AC IOL and aphakia. Surgical technique demonstrated by video.
Conclusion : Preoperative thorough evalution along with proper surgical technique can solve problem of patient with improper lens implantation.

Introduction

Cataract surgery maybe followed by eventful result, such as posterior capsular (PC) break, iris damage, intra ocular lens (IOL) or cataract dislocation, infection and longterm complications of posterior capsular opacification. The insidens were vary from many reports. The most common complication was posterior capsular break,[1] insidens 0,7-16% and even higher in unexperienced surgeon.[2] Final visual acuity in this situation is worse than uneventful cataract surgery, which reported 87% gain 6/12 or better.[3] Most of poor visual acuity result due to cystoid macular edema (CME).[4]

When PC break occured, the surgeon tend to implant IOL in anterior chamber, inserting the IOL in the sulcus with bigger IOL diameter, or to suture/fixate in the sclera.

There were few report on reoperation and reimplantation after eventful cataract surgery. We report surgical technique and result of reoperation and reimplantion of the IOL.

Material and Methods

We conduct retropective study of medical records of patients underwent reoperation and IOL reimplantation. Previous cataract surgery was done elsewhere, and patients referred or come by themselves. Surgery was done at RSU UKI or RS PGI Cikini, Jakarta.

Routine ophthalmic examination was done, to evaluate corneal clarity, especially central; thorough examination of lens position and remain lens capsular; iris examination including synechiae anterior and posterior. Funduscopy done carefully to evaluate macular conditiion, optic nerve head and peripheral. Intraocular pressure (IOP) examined with Schiotz tonometer. Informed consent was delivered as complete as possible to make patient understand risk of lens reimplantation (retinal detachment, hemorrhage, possibilities of similar visual acuity after surgery, infection, inflammation, expulsive hemorrhage and glare).

Surgery was done by one surgeon (GS) under local retrobulbar anesthesia, using 2% lidocain 2 ml mix with marcain 1 ml in similar syringe. Pupil was dilated maximally using mydriaticum and epinephrin topical prior to surgery.
Corneal limbal was penetrated and viscoelastic injected into anterior chamber (AC) and into sulcus. Synechiolysis done bluntly using Sinskey II or sharply when needed using 26G needle. Vannas scissor used to cut and release synechiae after corneal wound enlarged. While doing this procedure, careful examination of remain capsule done, for IOL insertion. Anterior vitrectomy done with Vannas scissor.

After synechiolysis done 360^0, viscoelastic injected under the iris and above the remain capsule. Decentered IOL then was repositioned or exchange with sulcus IOL (NeoEye™, Rohto). If needed, one of haptic was sutured at sclera, 1 mm behind the limbus under the conjungtiva. Revitrectomy anterior done under viscoelastic, followed by AC flush to remove remain viscoelastic from AC. Corneal wound sutured with 10.0 Nylon.

Clinical finding during and after surgery was noted. Follow up visit schedule was 1,3 and 14 days postoperatively, then every month for 3-6 months. Topical medication including steroid and antibiotics, antiglaucoma oral for 4 days. Oral steroid was given as per indication.

Statistical analysis done with SPSS 15.0, with Paired t test after normality tes using Kolmogorov-Smirnov test, and 95% confidence interval.

Result

There were 8 patients who has complain due to previous cataract surgery, consist of 4 male and 4 female with mean of age 56.3 ± 18.5 years (27 – 73 years). All patients complain were vision unimproved after surgery, prolonged ocular pain, redness, or referred by eye surgeon. All cases had posterior capsule break, reaching peripheral and invisible by slitlamp examination despite capsule opacification. Synechiae was seen along with capsular break edge. Synechiolysis was done through this break edge using sharp bent 26G needle and long Vannas.

There were 5 patients with uveitis and vitreous opacity. Central cornea was clear, cicatrization peripherally due to incision/surgery. Six patients were extracapsular surgery, and two with phacoemulsification incision. One patient has anterior chamber lens, with severe pain and IOP 38 mmHg. Two cases had broken posterior IOL which some was

dislocated to vitreous cavity; and remain 5 cases were aphakia. Duration of illness before reoperation was 3-24 months.

Hyphema occured after surgery (1 case) and resorbing gradually in two weeks. All cases has sulcus implantation with fixation, using IOL overall length 13.5 mm and optical diameter 6.5 mm. After surgery, three cases has enlarged pupil due to iridotomy while synechiolysis or due to fixed dilated pupil. In these case, optic edge was exposed without complaint of significant glare. These maybe due to corneal scar peripheral or improved vision after surgery.

Patients demography revealed in Table 1. Overall there were improved vision and reduced IOP before and after surgery (p 0.000). Although IOP postoperative reduced, but statistically not significant (p 0.140), Tabel 2. Figure 1 revealed vision before and after surgery.

Tabel 1. Karakteristik pasien, kondisi sebelum dan sesudah operasi.

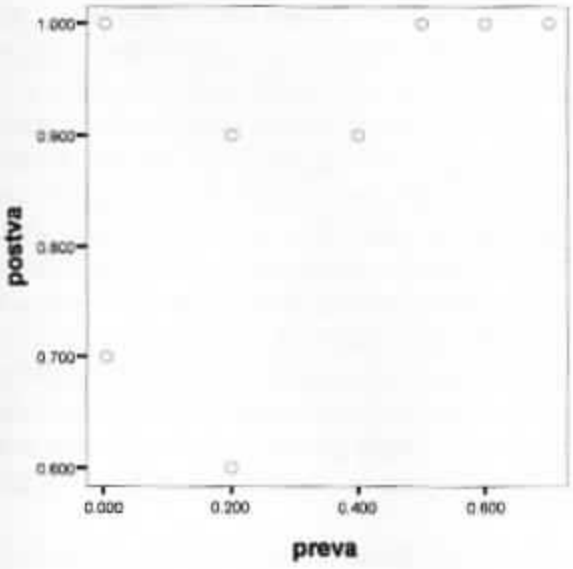
No	Usia	Jenis Kelamin	BCVA Pre	BCVA Post	Kondisi Mata	TIO pre	TIO post	Follow-up (bulan)	
1	64	Laki	0,2	0,9	ac iol, after pc iol drop	15	18	4	
2	73	Wanita	0.005	0,7	haptic pc in ac, pc rupture	16	14	4	
3	72	Wanita	0.001	1.0	3 times pc dislocated	36	19	24	
4	28	Laki	0.6	1.0	pc rupture juvenile cataract	18	20	2	
5	27	Laki	0,5	1.0	pc rupture juvenile cataract	13	12	1	loss to f-u
6	56	Wanita	0,7	1.0	pc rupture afakia	18	12	24	
7	67	Wanita	0.2	0.6	pc rupture afakia	30	11	60	
8	63	Laki	0.4	0.9	pc rupture afakia	16	16	3	

BCVA Pre: tajam penglihatan terbaik dengan koreksi sebelum operasi.
BCVA Post: tajam penglihatan terbaik dengan koreksi setelah operasi.

Tabel 2. Uji statistik untuk tajam penglihatan dan TIO.

	X	SD	p value
BCVA pre	0.33	0.26	0.000
BCVA post	0.89	0.16	
TIO pre	20.25	8.2	0.140
TIO post	15.25	3.5	

Gambar 1. Scatter plot tajam penglihatan sebelum dan sesudah operasi



preva = BCVA Preoperatif
postva = BCVA Postoperati

Diskusi

Secondary lens implantation can be done in any condition of vitreous loss[5], IOL dislocation or decenteration, pupillary capture, glaucoma or ocular hypertension, chronic corneal edema/decompensation, late hyphema, pseudophakic cystoid macular edema and chronic uveitis.[6] Management of irritation due to IOL depend on severity. Initially management can be done using topical medication, and increased IOP manage by anti glaucoma. If the disorder due to the IOL, such as AC IOL, then lens reposition or exchange should be considered.

Proper secondary implantation is debate full. Either choice wasposterior chamber IOL implantation (intra bag IOL implantation) or transscleral-sulcus fixation.ution, If posterior capsule still adequate, in the bag IOL is a better solution. Sulcus fixation is solution if any remain adequate capsule. Rudometkin et al. reported that IOL reposition and fixation has BCVA postoperative 20/40 or better in 93.3%.[9] Sulcus fixation has benefit compare to AC IOL, that they induce less angle and injury, reduced pupillary block and secondary glaucoma.[1]

Contraindication for sulcus fixation was history of iris pigment dispersion due to previous PC IOL, extralarge sulcus that cause haptic fixation done improperly. The treatment of choice for this situation was scleral fixation or AC IOL.[1] Multiple piece IOL can damage posterior iris, and induce pigmentary glaucoma and iritis post implantation.[6,10] Foldable IOL fixation has benefit due to small incision and faster visual rehabilitation, less risk intraoperative, and

less inflammation.[7] The most dangerous complication for this surgery was suprachoroidal hemorrhage.[8]

Pada kasus-kasus yang kami laporkan di atas, semua pasien mengalami gangguan visus, dengan kondisi lain yang beragam, seperti glaukoma, uveitis kronik dan sebagainya. Seluruh kasus tidak dilakukan fiksasi IOL di sulkus, tetapi penanaman saja tanpa diikat. Kondisi ini dimungkinkan karena operasi katarak sebelumnya yang bermasalah masih menyisakan sebagian sisa kapsul di pinggir. Seiring waktu, sisa kapsul ini menebal dan memudahkan visualisasi, sehingga dengan membuka daerah sulkus dengan menyuntikkan viskoelastik di antara sisa kapsul dengan iris, maka lensa dapat dimasukkan dengan tepat. Hal yang terutama menurut kami dengan teknik ini adalah evaluasi preoperatif yang baik, membebaskan sinekia yang ada 360^0, membersihkan BMD dari sisa serat vitreus yang ada dan menggunakan lensa tanam yang ada dengan diameter optik yang besar ($\geq$ 6mm) dan *overall length* 13.5 mm. Dorongan haptik yang panjang ini akan membuat lensa stabil, dan diameter lensa yang besar (kalau tersedia sebaiknya yang berdiameter 7mm) membuat *glare* akibat pantulan di tepi optik terhindar karena tertutup pupil. Pada kasus-kasus kami, semuanya disertai dengan pupil yang lebih besar dari normal, $\geq$4 mm.

In our cases, improved visual acuity significant statistically correlated with eventful previous cataract surgery. This was due to dispersive iris pigment on the lens surface and endothelium, cystoid macular edema, and decentered IOL out of optical axis. Proper IOL implantation reduced inflammation and complication.

Overall we can say that secondary IOL implantation after eventful cataract surgery can produce promising result if done with proper technique. This study needs larger data for better interpretation.

References

1. Duane's clinical opthalmology [on CD-ROM]. Tasman W. USA: Lippincott Williams & Wilkins; 2003.
2. Vajpayee RB, Sharma N, Dada T, Gupta V, Kumar A, Dada VK. Management of posterior capsule tears. Surv Ophthalmol. 2001 May-Jun;45(6):473-88. Review.
3. Chan FM, Mathur R, Ku JK, Chen C, et al. Short term outcomes in eyes with posterior capsule rupture during cataract surgery. J Cataract Refract Surg. 2003;29(3):537-41.
4. The Royal College of Ophthalmologists. Cataract surgery guidelines 2004. London: Scientific Department The Royal College of Ophthalmologists; 2004.
5. Hykin PG, Gardner ID, Corbett MC, Cheng H. Oxford Eye Hospital: Primary or secondary anterior chamber lens implantation after extracapsular cataract surgery and vitreous loss. Eye. 1991;5(Pt 6):694-8.
6. American Optometric Association. Optometric clinical practice guideline: Care of the adult patient with cataract. USA: AOA Board of Trustees. 2004.
7. Yepez JB, de Yepez JC, Valero A, Arevalo JF. Surgical technique for transscleral fixation of a foldable posterior chamber intraocular lens. Ophthalmic Surg Lasers Imaging. 2006;37(3):247-50.

8. Kjeka O, Bohnstedt J, Meberg K, Seland JH. Implantation of scleral-fixated posterior chamber intraocular lenses in adults. Acta Ophthalmol. 2008; 86(5):537-42.
9. Rudometkin NJ, Thomas EL, Roeske RE, Fabricant RN. Long-term safety and efficacy of repositioning dislocated plate haptic intraocular lenses in the ciliary sulcus. Am J Ophthalmol. 2005;140(5):918-20.
10. Uy HS, Chan PS. Pigment release and secondary glaucoma after implantation of single-piece acrylic intraocular lenses in the ciliary sulcus. Am J Ophthalmol. 2006;142(2):330-2.

D3.2.3

6906

Certificate of Attendance

This is to certify that

Gilbert WS Simanjuntak

attended the

XXVI Congress

of the

EUROPEAN SOCIETY OF CATARACT AND REFRACTIVE SURGEONS

held in Berlin, Germany
from 13–17 September, 2008

27 CME Credits

Paul Rosen
PRESIDENT