



ROLE OF CAPSULAR TENSION RING IN COMPLICATED CATARACT SITUATIONS

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ABSTRACT **METHODOLOGY:** A non-randomized, prospective, hospital-based interventional study. 50 eyes with compromised zonules in complicated cataract surgery situations were considered. Preoperative comprehensive ophthalmic examination , Grading of the zonular dehiscence, Fundus examination , Keratometry, A-scan, Biometry was done. Size of CTR was selected. Patients underwent manual small incision cataract surgery with CTR implant, intra-operative complications were noted. Visual acuity, capsular bag stability was noted at 1 month , 6 months postoperatively . **RESULTS:** SIMC with PEX cases were 18 % , traumatic cataract 14 % , SHMC 16 % . Preoperatively 20 % of the cases had subluxated lens, 42 % had phacodonesis , 44 % had zonular dehiscence . 32 % of the cases had intra-operative zonular dehiscence. 38% of the cases had 6/6 vision on post operative day 1 , 56% of them had 6/6 vision by 1 month , 68% of the cases had 6/6 vision at end of 6 months.. 98 % of the cases had well centered IOL and stable IOL bag complex, with 2 % cases having complication of anterior dislocation of iol bag complex at end of 6 months. 50 % , 25 % of the SIMC with old uveitis, SHMC cases respectively had 6/6 vision. **CONCLUSION :** Capsular tension rings have made SICS , phacoemulsification and in-the-bag IOL implantation easier in eyes with zonular dialysis of up to approximately 150 degrees. Our surgical success rate was 98 % , and all eyes had a well-centered IOL even after 6 months of surgery. CTR implantation significantly decreased the percentage of PCO.

KEYWORDS : Capsular tension ring, SICS, PCO, Zonular dehiscence, Subluxation, Phacodonesis, BCVA, IOL Bag Complex.

INTRODUCTION:

Cataract is a major cause of curable blindness and visual impairment throughout the world and is likely to present as an increasing burden to the health care systems as the world's population ages due to in life expectancy. Cataract being the major cause for about half of the world's blindness, there is little likelihood of effective prevention becoming available in the next few years. Surgery remains the only mode of treatment. In case of complicated cataract situations , safe and effective surgery plays a very important role. ¹Modern small-incision cataract surgery leads to more rapid visual rehabilitation, allowing patients to return to their daily routines sooner. Although surgical techniques have developed considerably, intraocular lens (IOL) decentration and tilting resulting from im-proper integrity of the lens capsule and posterior capsule opacification (PCO) remain problems. To attempt to overcome these complications, researchers developed different IOL shapes and materials. The practical limitations of new IOL designs, however, have not completely solved these problems. The new acrylic IOLs reportedly decrease the incidence of PCO but have not been shown to lead to less IOL decentration and tilt than other materials . The capsular tension ring (CTR) has been proposed to prevent PCO in vitro, capsular contraction ,with an advantage of capsular bag stability and thus preventing IOL decentration ²The CTR is indicated for use in all cases of subluxation of the lens, ranging from common cases like traumatic displacement (mechanical or surgical), Marfan's syndrome, pseudoexfoliation syndrome (PEX) and hypermature cataract to rare cases like aniridia and intraocular tumors, high myopia, retinitis pigmentosa , an old case of uveitis ^{3,4,5,6,7} An additional advantage noted with CTR is, according to the "no space no cells" theory, capsular tension rings may also have a role in the prevention of PCO. Equatorial CTR have the ability to maintain the contour of the capsular bag and to stretch the posterior capsule to prevent excessive posterior shrinkage of the capsular bag secondary to fibrosis. They also have a role in prevention of anterior capsule opacification.

Aims and objectives : To review the visual ,surgical and anatomical outcome in capsular tension ring in compromised zonules in the management of complicated cataract.To know how effective is CTR in stabilizing the posterior capsular bag .To study if CTR is effective in reducing surgical complications, improve refractive results .

Subjects and Methods:

The study is a Non-randomized, prospective, hospital-based interventional study.The study was undertaken in 50 patients with complicated cataract situations admitted in tertiary care centre in South India..Study was conducted from October 2019 to April 2021. Inclusion criteria was patients of either sex. All cases of cataract with compromised zonules undergoing surgery .All cases of cataract with the following associated factors High myopes , Pseudoexfoliation syndrome , Retinitis pigmentosa , Hypermature cataract ,Subluxated

cataract , Uveitis , Coloboma of lens ,Congenital syndromes like Marfans , homocystinuria , Sulfite oxidase deficiency . Exclusion criteria was Patients having zonular dehiscence beyond 120 degrees or 5 clock hours. Any patient not willing for CTR insertion. Patients with corneal pathology including corneal endothelial dystrophies. Any other ocular conditions which can influence the post operative visual outcome like Posterior segment pathologies, macular lesions and optic nerve disease.

Methodology: Patient demographics such as name, age, sex, occupation and address were noted. Written & informed consent was taken before capsular tension ring was implanted. A careful detailed history was taken regarding, duration and symptoms of the disease, history regarding trauma to the eye, past history of uveitis, night blindness, diminution of vision since childhood, metabolic disorders if any were noted. Uncorrected visual acuity (UCVA), pinhole and best corrected visual acuity (BCVA) using Snellen's chart was done. Meticulous refraction , Detailed slit lamp evaluation of anterior segment before and after dilatation of pupil.In PEX cases: small pupil, pupillary synechiae, zonular laxity / dialysis, capsule fragility, vitreous prolapsed, shallow anterior chamber /hyper deep anterior chamber were noted with or without increased intraocular pressure. Zonular dehiscence examination: the lens shifted significantly, and pupillary dilation revealed an irregular equatorial region of the cataract, with regions where the zonules are visibly absent. Hard cataracts associated with any Subluxation of lens with or without phacodonesis were noted. Grading the zonular dehiscence, Subluxation, phacodonesis was made accordingly. Anterior chamber depth, iridodialysis. Intraocular pressure using Schiottz Tonometer/ Non Contact Tonometer/ Goldman applanation tonometry was done . Sac syringing to test patency of lacrimal passage. Fundus examination of the both eyes, was done to look for fundus abnormalities like degenerative myopic changes , waxy disc pallor, pigmentary changes in mid peripheral fundus, arteriolar attenuation seen in Retinitis Pigmentosa were noted . Keratometry readings A-scan for axial length , Biometry to determine power of intraocular lens (IOL. B scan for posterior segment pathology . Anterior segment OCT was also done to confirm such Subluxation of lens. The size of the CTR was noted according to the need of the patient.In normal axial length patients: 12/10 mm diameter. In mild to moderate myopia: 13/11mm diameter.In high myopia: 14/12mm diameter¹²

Statistical analysis used: Results are presented as Mean \pm SD and Range values for continuous data and frequencies as number & percentages. Paired t test was used to compare the Pre-post changes in mean values. Catagorical data was analyzed by Chi-square test. A P value of 0.05 or less was considered to be statistically significant. SPSS (Version, 18) software was used for data analysis.

RESULTS:

Out of total 50 people considered under the study. Mean age group was 55.4 ± 10.5 years and range was between 22 and 70 years. 48% were females and 52 % were males. Maximum of 18% of the total cases had SIMC with PEX (Table 1). 16 % of them had SHMC. 14% of the total cases operated had traumatic cataract, 12 % respectively belonged to SIMC, SIMC with pathological myopia and SMC. 4 % belonged to PSIMC with old uveitis, SIMC with old uveitis. 2 % respectively had SHMC with PEX, SIMC with RP. Out of the 50 cases operated, 20% of the cases had subluxated lens, 42 % had phacodonesis and 44 % of them had zonular dehiscence. Out of the 20 % cases with subluxated lens 10 % belonged to grade 2, 8% to grade 1, 2 % to grade 3, out of the 42 % with phacodonesis 22 % belonged to grade 2, 16 % belonged to grade 3 and 4 % to grade 1 (Table 2,3). Among the 44 % with zonular dehiscence 22 % belonged to grade 2, 18 % belonged to grade 3 and 4 % belonged to grade 1. 36 % of the patients had vision less than CF $\frac{1}{2}$ M, 34 % of the population had vision CF 1M to CF 3 M, 4 % with vision CF 3M to CF 6 M. 11 % of them with vision $> 6/60$ preoperatively (Table 4). 30 of them had axial length of < 24 mm, 20 of them had ≥ 24 mm. 43 eyes were implanted with CTR no 10 and the rest 7 were implanted with CTR no 11. Pre operative and post operative IOP was found to be 17.9 ± 4.2 , 17.3 ± 1.9 respectively. No significant difference was found pre and postoperatively in IOP. During pre operative assessment, zonular weakness was found to be in 22 eyes whereas; intra operative zonular weakness was noted in 14 patients during or after nucleus delivery (Table 5). On post operative day 1, 19 of them had 6/9 to 6/6 BCVA, 15 of them had 6/12 to 6/18, 4 of them had 6/60 to 6/24 to 6/36 BCVA respectively. 3 of them had BCVA of CF < 1 M, 5 of them had BCVA OF CF 2M to 6 M (Table 6). At 1 month follow up 28 of them had 6/9 to 6/6 BCVA, 11 of them had 6/12 to 6/18, 4 of them had 6/24 to 6/36 BCVA respectively. 2 of them had BCVA of 6/60, 5 of them had BCVA OF CF 2 M – 6 M. At 6 months follow up 34 of them had 6/9 to 6/6 BCVA, 8 of them had 6/12 to 6/18, 2 of them had BCVA of CF < 1 M, 5 of them had BCVA OF CF 2M to 6 M, 1 patient with vision $< CF 1 M$. 22 % of the eyes preoperatively had BCVA 6/60 preoperatively, 78 % of them had vision counting fingers or lesser. Post operatively 38 %, 56 %, 68 % of them had 6/9 to 6/6 vision by post operative day 1, 1 month, 6 months, respectively. 30 %, 22%, 15 % of them had 6/12 to 6/18 vision by post operative day 1, 1 month, 6 months, respectively. 2 % respectively had vision 6/60. 8%, 5 %, 6 % respectively had vision $< 6/60$ by post operative day 1, 1 month, 6 months, respectively (Table 7). 50 % of the eyes with diagnosis PSIMC WITH OLD UVEITIS at the end of 6 months had BCVA of 6/9 to 6/6, 6/12 to 6/18 respectively. Among the eyes with SHMC 25% of them respectively had 6/6 to 6/24 vision respectively and 50 % of them had 6/12 vision; 100 % of the Eyes with SHMC with PEX.

SHMC with LIG 100 % of cases had 6/18-6/12 vision. Eyes with only SIMC, 67% of them gained 6/9 to 6/6 vision, 33% of them had 6/60 vision. SIMC WITH PATHOLOGICAL MYOPIA cases regained vision upto 6/60 in 33.3 % of the cases and 4 of them with vision in counting fingers (Table 8).

Cases with diagnosis of SIMC WITH PEX had vision of 6/9-6/6 in 55.6 % of cases and 44.4 % had 6/12 -6/18 vision, SIMC WITH RP 100 % of the cases vision remained to be counting fingers, SIMC, OLD UVEITIS 50 % of the cases has 6/9 - 6/6 vision. Cases with SMC postoperatively at 6 months respectively had 33.3 % of 6/9 -6/6, 6/12 - 6/18, 6/24 - 6/36. Patients with TRAUMATIC CATARACT and zonular dehiscence 57.1 % of the eyes had 6/9 - 6/6, 14.3 % had 6/12-6/18, 28.6 % had counting fingers vision at the end of 6 months.

Looking at the overall results for patients with zonular dehiscence after undergoing CTR with manual small incision cataract surgery, at the end of 6 months 38% of the eyes had 6/9 -6/6 BCVA, 30 % had 6/12 - 6/18, 8 % had 6/36 to 6/24, 8 % had 6/60 vision, rest 16 % had counting fingers.

Postoperatively in all the cases IOL was well centered placed in the pupillary margin, except for one case where IOL and CTR complex was displaced anteriorly at the end of 6 months spontaneously.

98% of the cases IOL and CTR were placed in bag, whereas 2 % of the cases CTR was placed in BAG and IOL was placed in SULCUS due to other surgical complications and difficulty while operating a traumatic cataract. At the end of 6 months follow up we did not come across any case with posterior capsular opacification.

DISCUSSION:

This study reports improved BCVA postoperatively in patients

receiving capsular tension ring for zonular dehiscence, disinsertion, weakness, capsular contraction during different complicated cataract situations. In our study 18 % of the cases (table 1) had pseudoexfoliation material found along with cataract. The prevalence of pseudoexfoliation significantly increased with advancing age. Mature cataract and nuclear sclerosis predominated in eyes with pseudoexfoliation.

This is in line with other studies where Iwona et al concluded that pseudoexfoliation material was found in 8.2 % of the patients and prevalence of pseudoexfoliation significantly increased with advancing age.⁸ 16 % of the total patients had SHMC, a study conducted by Shubada Sunil et al called **Epidemiological correlates** of cataract cases in a tertiary health care centre expressed that more than half the percentage of the population in their study had senile mature cataract and 11.5 % of them had SHMC.⁹ In our study different grades of cataract with different associated features which are complicating the cataract surgery were assessed for their number and outcome. The prevalence of each type of cataract in our study could not be exactly compared with others as type of cataract and its prevalence predominantly depend on their associated factors in the eye and other systemic features. Out of the 50 cases operated, (table 2) 20% of the cases had subluxated lens, Gimbel H V et al and Christopher et al have reported a prevalence of IOL dislocation of about 0.2 % to 3 % in their study.¹⁰ We had comparatively more number (20 %) of cases of subluxated cataractous lens compared to other studies, as we considered only cases with complicated cataract situations for evaluation, and control cases were not present for comparison. 42% of the cases had phacodonesis (table 2) and 44% had zonular dehiscence. Study by Xia - wiu - et al 3.2 % of the total patients included under their study had idiopathic phacodonesis associated with senile cataract.¹¹ The incidence of zonular dehiscence could not be compared with other studies as zonulopathy depends on previous traumatic history, pseudoexfoliation, myopia etc. Incidence is variable depending on each condition and could not be predicted.

Out of 20 % cases with subluxated lens (table 3) 10 % belonged to grade 2, 8% to grade 1, 2 % to grade 3. Out of the 42 % with phacodonesis 22 % belonged to grade 2, 16 % belonged to grade 3 and 4 % to grade 1 this comparison is favorable with study by Xia - wiu - et al in which there were 36 eyes (85%) with grade 1 phacodonesis, and 5 eyes (12 %) with grade 2, 1 eye (2 %) with grade 3.⁴ Among the 44 % with zonular dehiscence 22 % belonged to grade 2, 18 % belonged to grade 3 and 4 % belonged to grade 1. We did not come across any study to compare the grades of subluxated lens and zonular dehiscence among cataract patients.

36% of the patients had vision less than CF $\frac{1}{2}$ M, 34 % of the population had vision CF 1M to CF 3 M, 4 % with vision CF 3M to CF 6 M. 11 % of them with vision $> 6/60$ preoperatively (table 4). Since varying grades of visual acuity was present when evaluated preoperatively, a simple method of classifying the patient into these 3 groups were considered while tabulating for results.

Among the 50 eyes operated for zonular weakness, 43 eyes were implanted with CTR number 10 and the rest 7 were implanted with CTR number 11.

In our study, Pre operative and post operative IOP was found to be 17.9 ± 4.2 , 17.3 ± 1.9 respectively. There was no significant difference in IOP was found when compared pre and postoperatively. Transient increase in IOP can be expected in few cases due to anterior positioning of the CTR IOL bag complex leading to angle closure.¹² During pre operative assessment, (table 5) zonular weakness was found to be in 22 eyes whereas; intra operative zonular weakness was noted in 14 patients during or after nucleus delivery. The remaining 14 patients were PEX patients, myopia and retinitis pigmentosa in which Zonular dialysis is found to be a common complication of manual SICS during nucleus delivery and with small rhexis or inadequate hydrodissection. Sharma u et al discussed about the Zonular dialysis which occurred in 5.0% cases of visco expression group and 2.5% cases of phacosandwich group in his study.¹³

On post operative day 1, 38% of them had 6/9 to 6/6 BCVA (table 6), 30% of them had 6/12 to 6/18. At 1 month follow up 56% of them had 6/9 to 6/6 BCVA, 22% of them had 6/12 to 6/18. At 6 months follow up 68% of them had 6/9 to 6/6 BCVA, 16 % of them had 6/12 to 6/18.

Our study compares favorably with other studies like study by Wang et

al that illustrated that CTR use for zonular dialysis was associated with an improved postoperative BCVA in 72.6% of cases. Reports of visual outcomes following zonular dialysis have hitherto been limited by follow-up period, sample size, type of cataract operated, association and cause of cataract, refraction and status of the retina and no adjustment for pre-operative BCVA. A prospective study of 21 eyes from 19 patients, with documented zonular dialysis and CTR use, showed that 15 eyes (74.42%) had a postoperative BCVA of 6/12 or better. However capsular tension ring would not improve the optical quality of the patient, we would like to convey that use of capsular tension ring has improved the outcome of zonular weakness and thus by stabilizing the bag and the position of posterior chamber intra ocular lens. Visual outcome due to capsular tension ring is not statistically significant, but Preoperative and Postoperative BCVA when compared are statistically significant. In 2009, Rohart and Gatinel found in uneventful cataract surgery that a CTR does not improve the optical quality of the pseudophakic eye. Subsequently, Schild et al. compared refractive outcomes in myopic eyes between phacoemulsification and IOL implantation with and without a CTR. There was no statistically significant difference in the mean absolute refractive prediction error between the CTR group and the control, but there was lower variance in the absolute refractive prediction error in the CTR group. They concluded that a CTR had no consistent effect on refractive outcomes in highly myopic eyes, although there was a tendency toward higher precision in outcomes with a CTR. Mastropasqua et al. demonstrated in a 2013 prospective, randomized trial of 60 eyes that an inclusion of a CTR implant paired with a diffractive multifocal IOL reduced the ocular wave front error related to a reduction of third-order aberration when compared to multifocal IOL placement alone. The authors attributed this reduced wave front error to better IOL position. 50% of the eyes (table 7) with diagnosis only SIMC, PSIMC WITH OLD UVEITIS, SHMC with PEX, SHMC with LIG, SMC, traumatic cataract at the end of 6 months had BCVA of > 6/18. Similarly, a study by Ionides et al assessed BCVA in 17 patients with zonular dialysis, and found acuity of 6/12 or better in 80% of patients with no previous ocular co-morbidity, and in 42.9% of patients with ocular co-morbidity. Pseudoxfoliation is a leading risk factor for late spontaneous in-the-bag IOL dislocation, but we did not come across such a complication in our patients at the end of 6 months. 14% of the total cases in which cataract was associated with myopia or retinitis pigmentosa about 90% of them had vision 6/60 or lesser with no improvement post operatively (Table 8). At the end of 6 months we did not come across any case with significant posterior capsular opacification. Halili et al in their study, concluded with the mean time interval from surgery to PCO measurement about 43.4 ± 11.2 months (range: 25-60) for the ring group and 43.1 ± 11.6 months (range: 24-60) for controls (P = 0.91). Five eyes (14.7%) in the ring group had no PCO; all eyes in the control group developed some amount of PCO.

Postoperatively, in 98% of the cases, IOL and CTR were placed in bag and were well centered, except for one case where IOL and CTR was displaced anteriorly at the end of 6 months spontaneously, whereas 2% of the cases CTR was placed in BAG and IOL was placed in SULCUS due to other surgical complications and difficulty while operating a traumatic cataract. Coelho et al. reported a 58-year-old patient with significant inferonasal subluxation of the IOL with a contracted capsular bag 3 years after uncomplicated phaco-surgery. The progressive contraction of the anterior capsule can directly result in zonular dehiscence, leading to IOL and capsular complex dislocation. Therefore spontaneous anterior dislocation has occurred due to fibrotic contraction and opacification of the anterior capsule which usually occurs 3 to 6 months after surgery.

This study has number of limitations like, cases with only complicated cataract situations were considered under the study for evaluation, there were no control cases considered for comparison. We evaluated and compared the visual outcome preoperatively and postoperatively in patients with different cataract, different associated co morbidities, different fundus status, variable refractive errors and intra ocular pressures; therefore selection bias has limited the outcome of the study. Major drawback was, non availability of UBM, all cases implanted with CTR could not be evaluated for position, alignment of the ring, and status of the bag therefore anatomical outcome of the zonules, IOL and bag could not be completely commented upon.

CONCLUSIONS:

Capsular tension or endocapsular rings have made SICS phacoemulsification and in-the-bag IOL implantation easier in eyes with zonular dialysis of up to approximately 150 degrees. Our surgical

success rate was 98%, and all eyes had well-centered IOL 6 months after surgery. CTR implantation significantly decreased the percentage of PCO. Visual recovery was also good with BCVA > 6/12 in >50% cases as in standard cataract cases. The CTR is a useful multipurpose device that effectively supplements the currently available IOL armamentarium. As such, it may be considered one of the most important recent innovations in anterior segment surgery

Table 1: Type Of Diagnosis

Diagnosis	No. of cases	%
PSIMC WITH OLD UVEITIS	2	4.0
SHMC	8	16.0
SHMC WITH PEX	1	2.0
SHMC, LIG	2	4.0
SIMC	6	12.0
SIMC OLD UVEITIS	2	4.0
SIMC WITH PATHOLOGICAL MYOPIA	6	12.0
SIMC WITH PEX	9	18.0
SIMC WITH RP	1	2.0
SMC	6	12.0
TRAUMATIC CATARACT	7	14.0
Total	50	100.0

Table 2: Pre Operative Findings

	Subluxated Lens		Phacodonesis		Zonular Dehiscence	
	No. of cases	%	No. of cases	%	No. of cases	%
Yes	10	20.0	21	42.0	22	44.0
No	40	80.0	29	58.0	28	56.0
Total	50	100.0	50	100.0	50	100.0

Table 3: Pre Operative Findings In Relation To Grading

Grade	Subluxated Lens		Phacodonesis		Zonular Dehiscence	
	No. of cases	%	No. of cases	%	No. of cases	%
Grade 1	4	8.0	2	4.0	2	4.0
Grade 2	5	10.0	11	22.0	11	22.0
Grade 3	1	2.0	8	16.0	9	18.0
No	40	80.0	29	58.0	28	56.0
Total	50	100.0	50	100.0	50	100.0

Table 4: Pre Operative Visual Acuity

Pre operative V/A	No. of cases	%
PL+PR+, HM+, CF ½ M	18	36.0
CF1M - CF3M	17	34.0
CF3M - CF6M	4	4.0
> 6/60	11	22.0
Total	50	100.0

Table 5: Pre Operative And Intra-Operative Zonular Dehiscence

ZD	PRE-OP		INTRA-OP	
	No.	%	No.	%
Present	22	44.0	16	32.0
Nothing Significant	28	56.0	34	68.0
Total	50	100.0	50	100.0

Table 6: Post Operative Beva

BCVA	Day 1		1 month		6 month	
	No. of cases	%	No. of cases	%	No. of cases	%
6/6--6/9	19	38.0	28	56.0	34	68.0
6/12--6/18	15	30.0	11	22.0	8	16.0
6/24--6/36	4	8.0	4	8.0	0	0.0
6//60	4	8.0	2	4.0	2	4.0
CF<1 M	3	6.0	0	0.0	1	2.0
CF 2-6M	5	10.0	5	10.0	5	10.0
Total	50	100.0	50	100.0	50	100.0

Table 7: Post Operative Beva At Every Follow Up Compared To Pre Operative Vision

V/A	Pre-op		Day 1		1 month		6 month	
	No.	%	No.	%	No. of cases	%	No. of cases	%
6/6--6/9	-	-	19	38.0	28	56.0	34	68.0
6/12--6/18	-	-	15	30.0	11	22.0	8	16.0
6/24--6/36	-	-	4	8.0	4	8.0	-	-
6//60	11	22.0	4	8.0	2	4.0	2	4.0
CF	39	78.0	8	16.0	5	10.0	6	12.0
Total	50	100.0	50	100.0	50	100.0	50	100.0

Table 8: Post Operative BCVA In Co Relation With Diagnosis

Diagnosis		Post op BCVA					Total
		6/6-- 6/9	6/12-- 6/18	6/24-- 6/36	6/60	CF	
PSIMC WITH OLD UVEITIS	No.	1	1	-	-	-	2
	%	50%	50%	-	-	-	100%
SHMC	No.	2	4	2	-	-	8
	%	25%	50%	25%	-	-	100%
SHMC WITH PEX	No.	-	-	-	-	1	1
	%	-	-	-	-	100%	100%
SHMC, LIG	No.	-	2	-	-	-	2
	%	-	100%	-	-	-	100%
SIMC	No.	4	-	-	2	-	6
	%	67%	-	-	33%	-	100%
SIMC WITH PATHOLOGICAL MYOPIA	No.	-	-	-	2	4	6
	%	-	-	-	33.3%	66.7%	100%
SIMC WITH PEX	No.	5	4	-	-	-	9
	%	55.6%	44.4%	-	-	-	100%
SIMC WITH RP	No.	-	-	-	-	1	1
	%	-	-	-	-	100%	100%
SIMC, OLD UVEITIS	No.	1	1	-	-	-	2
	%	50%	50%	-	-	-	100%
SMC	No.	2	2	2	-	-	6
	%	33.3%	33.3%	33.3%	-	-	100%
TRAUMATIC CATARACT	No.	4	1	-	-	2	7
	%	57.1%	14.3%	-	-	28.6%	100%
Total	No.	19	15	4	4	8	50
	%	38%	30%	8%	8%	16%	100%

$X^2 = 69.12$, $P = 0.009$, S

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