



Short Communication

Studies on Cataract and Surgery operations conducted with School, College, and Rural People in Andhra Pradesh, Visakhapatnam, India

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Available online at: www.isca.in

Received 30th July 2013, revised 14th August 2013, accepted 25th August 2013

Abstract

The current study aimed to establish information on eye cataract and surgeries performed by Sankar foundations Eye Hospital located at Visakhapatnam. The study was carried out from 1997 to 2013 June. The grand total of the surgeries performed during study period were tabulated. The eye cataract 160154, 4732 ECCE, 13306 Phaco, 3293 retina, 311 squint, 4340 glaucoma, 1511 paediatric, 1800 cornea, 4331 minors, 921 orbit, among 1164815 O.P. patients. Besides these there were 3,326 cataract camps in rural areas, 173 Aarogyasri camps, 340 Diabetic Retinopathy Camps, 215 awareness camps respectively. 1088 schools and 8 colleges were screened, trained 5,618 teachers at school level and 73 teachers trained at college level.

Keywords: Cataract, surgery and Diabetic Retinopathy.

Introduction

Blindness and visual impairment is one of the global health problem reported by WHO¹. The aim of world's sight vision 2020 is to minimize the visual impairment and blindness; still we have 75% of the prevalence of blindness as per the data recorded by WHO². WHO (World health organization) states that approximately around 314 million peoples worldwide suffers with low vision and blindness³. Blindness also has profound socioeconomic implications, it was noted that without extra interventions, the global number of individuals would increase from 44 million in 2000 to 76 million in 2020⁴. A successful vision 2020 initiative would decrease blindness to only 24 million by 2020 and lead to 429 million blind persons avoided. The vision of the 2020 will give better economic gain US\$102 billion.

The performance of cataract intervention programmes is assessed by the number of cataract operations conducted in each year. In India the cataract programme number has been increased from 1.2 million in 1989 to 2.7 million in 1996 (Central Ophthalmic Cell, Directorate general health Services, Government of India unpublished data 1997). The outcome of cataract surgery for an individual or for a defined population is therefore as important as measuring the quantity of surgical operations performed. Outcome can be measured simply as the visual acuity in the operated eye or in the patient⁵. The current study aimed to report the information regarding eye cataract and surgery performed by the Sankar foundations, rural camps and school level camps and college level camps performed to motivate the students and trained the teachers.

Material and Methods

The current study examined visual acuity measurement, dilatation, and anterior posterior segment examination and for cataract patients small incision cataract surgery (SICS) and Phaco-emulsification techniques were used for current experimentation.

The Sight restoration rate (SRR): The following equation used for the analysis of the current study data

$$\text{SRR} = \frac{P(\text{before}) - P(\text{after})}{C} \times 100$$

Where: P (before) = Number of individuals with specified pre operative visual acuity in the better eye, P (after) = number of individuals with specified post operative visual acuity in better eye, C= the total number of eye cataract operations performed during the study period.

The present study also includes examining the data of eye cataract operations and field trials in several rural areas and school levels motivated and teacher training programmes. All the data tabulated and analyzed the data for the prevalence of eye cataract.

Results and Discussion

The great assessment was carried out in Sankar foundation Eye Hospital located at Visakhapatnam. The results of current study regarding eye cataract and surgeries were represented in table 1, eye camps in table 2, school level children eye screen programmes were mentioned in table 3 and college level programmes were represented in table 4.

Table-1
Shankar Foundation Eye Hospital Statistics of O.P. and Surgeries from 2nd June 1997 to June 2013

Year	Catract	ECCE	Phaco	Retina	Squint	Glucoma	Paediatric	Cornea	Minors	Orbit	Total	O.P.
1997	355	39	-	-	-	-	-	-	350	-	744	5381
1998	1740	299	-	-	-	-	-	-	375	-	2414	13011
1999	3354	465	-	-	04	50	-	-	280	-	4153	32722
2000	4294	420	-	19	04	149	-	-	345	-	5231	34980
2001	6059	253	-	02	-	275	-	-	262	-	6851	38452
2002	6553	179	-	56	11	290	-	-	388	-	7477	41785
2003	6934	130	193	102	14	260	72	-	220	-	7925	44921
2004	8992	192	435	210	11	342	185	20	275	-	10662	64693
2005	8698	180	746	152	-	361	155	01	303	-	10596	66805
2006	9235	183	866	97	01	432	135	31	197	-	11177	68879
2007	8378	152	998	131	10	364	149	88	287	-	10557	67643
2008	14925	358	1147	138	19	286	136	240	299	-	17548	106003
2009	20095	496	1456	256	48	432	227	297	368	-	23675	127546
2010	16771	389	1677	306	37	257	197	188	270	142	20234	114167
2011	17436	412	2189	709	76	413	100	309	59	353	22056	116053
2012	20206	460	2341	679	76	320	98	369	53	383	24985	147441
2013	6130	125	1257	436	-	109	57	259	-	43	8414	74333
G. Total	160154	4732	13306	3293	311	4340	1511	1800	4331	921	194699	1164815

Table-2

Eye Camps conducted by Shankar Foundation during study period

Cataract Camps in Rural Areas	3,326
Aarogyasri Camps	173
Diabetic Retinopathy Camps	340
Awareness Camps	215

Table-3

School level children Eye screened Programme conducted by Shankar Foundation

Number of Schools Screened	1,088
Teachers Trained	5,618
Number of School Children screened	2,50,570

Table-4

College level eye screening programmes conducted by Sankar Foundation Eye Hospital

Number of Colleges Screened	02
Teachers Trained	73
Number of College students screened	1866
Number of Spectacles used	68

Discussion: In the current study we employed a method to evaluate the performance of cataract operations generally recorded by the eye surgeons and the recoded data tabulated regularly. The ten different parameters taken in to consideration for the study among cataract and paediatric operations much stressed. Counselling programmes were conducted to avoid cataract and some other eye problems with school, college and rural peoples.

The first step in improving results of cataract surgery is to develop an awareness of the magnitude and causes poor outcome. This can be achieved if individual surgeons and hospitals begin to monitor the results on regular basis using the method employed in current study or similar kind of methods used for cataract surgeries by Limburg et al⁶. In Visakhapatnam Sankar Foundation eye hospital trying to create awareness for school children and rural areas by conducting awareness camps. Eye surgeons are actively participate in programmes and great achievement was aided by Foundation comparatively from last five years.

Conclusion

The present study carried out in Sankar Foudation Eye Hospital at Visakhapatnam improved statistical number in performing the cataract surgeries likewise a major hospitals in metropolitan cities will undertake this kind of projects to create awareness in society and for better future of India.

Acknowledgment

The author (cataract counsellor) thankful to Sankar Foundation Eye hospitals for providing opportunity for carried out this work.

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