



Cataract Patient Profiling in A Tertiary Hospital

KEYWORDS

Profile of patients, Cataract, Demographic data, Clinical data

Dr.N.Deepika

2nd year postgraduate, Dept. Of Ophthalmology, SVS Medical College & Hospital, Yenugonda, Mahabubnagar

Dr. A Narasimha Rao

2nd year postgraduate, Dept. Of Ophthalmology, SVS Medical College & Hospital, Yenugonda, Mahabubnagar

Dr.D.Chandrakanth Reddy

Asso. Professor, Dept. Of Ophthalmology, SVS Medical College & Hospital, Yenugonda, Mahabubnagar

Dr.M.Vijaya RamaRaju

Professor & HOD, Dept. of Ophthalmology, SVS Medical College, Yenugonda, Mahabubnagar.

ABSTRACT Cataract accounts for 41.8% of global blindness and 81% of blindness in India 1, 2. By 2020, the elderly population in India is expected to double further increasing the number of blind people 3.

Purpose: To analyze the profile of patients presenting for cataract surgery.

Materials and methods: A hospital based prospective observational study was conducted on 500 patients presenting for cataract surgery. Socio – Demographic and clinical data were noted.

Results: Out of 500 patients majority of them were 50-60 yrs of age (57.4%) among which most of them were females (63.6%). Many of them belonged to rural background (78.2%). Major occupation was agriculture (44.8%). Most of patients (76%) had a visual acuity less than 3/60 in operating eye. Pterigium (7.8%) and ARMD (8%) constituted major co-existing ocular morbidities while Hypertension (22.8%) and Diabetes (12.2%) were common systemic disorders. SICS with PCIOL implantation was major form of surgery (84.2%).

Conclusion: This type of data collection and reporting provides new material that can be used in better planning and improvement of cataract surgery services.

Introduction

Cataract accounts for 41.8% of global blindness and 81% of blindness in India ^{1,2}. By 2020, the elderly population in India is expected to double further increasing the number of blind people ³.

Blindness due to cataract presents an enormous problem in India not only in terms of human morbidity but also in terms of economic loss and social burden. A broad patient profile helps providers of eye services and their public health colleagues within Department of health and District health authorities.

Materials and Methods

This is a tertiary hospital based prospective observational study conducted on 500 patients presenting for cataract surgery to ophthalmology OPD, SVS Medical College and Hospitals, Mahabubnagar, Telangana during Jan 2014 to Dec 2014. Patients with senile cataract aged 50yrs and above were included. Patients with cataract aged below 50yrs, traumatic cataract, and complicated cataract were excluded. This type of profiling includes collection of socio – demographic data such as Age, Sex, Domicile, Occupation and Clinical data such as Visual Acuity with pinhole in operating and fellow eye, co- existing ocular and medical disorders, and type of cataract surgery implemented. Routine investigations like BP, lacrimal syringing, complete blood picture, RBS and special investigations like B- scan were done.

Data entered, validated and prepared for analysis in specially designed computer software. The SPSS – 13 software was used for data analysis.

Results

Data of 500 patients aged 50yrs and above presenting for cataract surgery were analyzed.

SOCIO – DEMOGRAPHIC DATA

Table 1: Age and sex distribution

Age Group (years)	Male No. (%)	Female No. (%)	Total No. (%)
50-60 yrs	92 (18.4%)	195 (39%)	287 (57.4%)
61-70yrs	78 (15.6%)	108 (21.6%)	186 (37.2%)
Above 70yrs	12 (2.4%)	15 (3%)	27 (5.4%)
Total	182 (36.4%)	318 (63.6%)	500 (100%)

Patients aged 50 – 60 yrs constituted the major (57.4 %) proportion of study and females (63.6%) constituted majority of study population.

Table 2: Urban and Rural distribution

Domicile	Male No. (%)	Female No. (%)	Total No. (%)
Urban	37 (7.4%)	72 (14.4%)	109 (21.8%)
Rural	146 (29.2%)	245 (49%)	391 (78.2%)
Total	183 (36.6%)	317 (63.4%)	500 (100%)

Maximum population was rural (78.2%). Hence, majority of patients were farmers 448 (44.8%) followed by daily labourers 246 (24.6%). Housewives constituted 166 (16.6%) while businessmen were 42 (4.2%).

Clinical data

Table 3: Visual Acuity in Operating and Fellow Eye

Visual Acuity	Operating Eye No. (%)	Fellow Eye No. (%)
6/18 or Better	0	95 (19%)
6/60 – 6/24	51 (10.2%)	110 (22%)
<6/60 – 3/60	69 (13.8%)	125 (25%)
<3/60	380 (76.0%)	170 (34%)
Total	500 (100%)	500 (100%)

Majority of patients (76%) had visual acuity < 3/60 in operating eye.

Table 5: Co – existing Ocular and Medical disorders

Ocular Disorders	Pterygium	ARMD	Glaucoma	PXF with Glaucoma	Corneal Disorders	Diabetic Retinopathy	Hypertensive Retinopathy	Total
	39	40	17	14	12	3	2	127
Medical Disorders	Hypertension	Diabetes	COPD	Asthma	IHD	Total		
	114	61	7	5	5	192		

Associated common ocular disorders were Pterygium, ARMD and medical disorders were Hypertension, Diabetes

Table 7: Type of surgery done

Type of Surgery	Number of Patients	Percentage (%)
ECCE with PCIOL	21	4.2
SICS with PCIOL	421	84.2
SICS with ACIOL	18	3.6
SICS only	4	0.8
Phaco with PCIOL	36	7.2
Total	500	100

SICS with PCIOL was major (84.2%) mode of surgery.

DISCUSSION

Age-related cataract is one of the most common diseases and whose prevalence is expected to rise in the coming years in developing countries^{4, 5}. To a great extent, the occurrence of this type of cataract is determined by ageing and, therefore, with longer life expectancies, it is bound to increase^{6, 7}. Cataract extraction surgery is among the most common surgical procedures. In general, it is highly beneficial for patients as has been demonstrated by numerous studies^{8, 9}.

Blindness due to cataract surgery presents an enormous problem in India not only in terms of human morbidity but also in terms of economic loss and social burden. The WHO survey has shown that there is a backlog of over 22 million blind eyes in India and 80.1% of these are due to cataract. Aim of our study was to look at the profile of patients presenting for cataract surgery at SVS eye hospital, Mahabubnagar. Several previous studies have assessed the association of socio-demographic factors with the presence of cataracts or with the indication of cataract extraction surgery in this patients.^{10, 11, 12}

In our study majority of patients aged between 50-60 yrs (57.4%) and Females (63.6%) constituted majority of study population. In similar study, conducted by Parul Desai et al, women formed 65% of the study group in all age groups except for the youngest (50-54yrs). Most of them belonged to rural (78.2%) background.¹²

Most of patients (76%) had visual acuity <3/60 in the operating eye. Visual acuity in the fellow eye was <3/60 in majority (34%). In Parul Desai et al 54 % of patients had visual acuity of 6/12 – 6/60. Pterygium (7.8%) and ARMD (8%) constituted the major proportion of co-existing ocular disorders. Diabetic Retinopathy (0.6%), Hypertensive Retinopathy (0.4%) was least observed associated ocular disorders in our study. As compared to this ARMD was (16.9%), Glaucoma (11.2%), Diabetic Retinopathy (3.4%) in related study by Parul Desai et al.¹²

38.4% of our patients had associated systemic disorders. Hypertension (22.7%) and diabetes (12.1%) were most common. As compared to this 57% of patients had medical disorders in related study by Parul Desai et al. SICS with PCIOL implantation was major (84.2%) mode of surgery in our study in contrast to this, Phacoemulsification was used in 77% of cataract operations in related study by Parul Desai et al.¹²

Conclusion:

This type of data collection and reporting provides new material that can be used in better planning and improvement of cataract surgery services.

REFERENCE

- Resnikoff S, Pascolini D, Etya'ale D, Kocur I, Pararajasegaram R, Pokharel GP, et al. Global data on visual impairment in the year 2002 Bull WHO 2004; 82:844-51. | 2. Jose R, Bachani D. World Bank assisted cataract blindness control project. Indian J Ophthalmol 1995; 43:35-43. | 3. LimburgH, Kumar R, Bachani D. monitoring and evaluating cataract intervention in india. Br J Ophthalmol 1996; 80:951-5. | 4. Congdon N, Vingerling JR, Klein BE, West S, Friedman DS, Kempen J et al. Prevalence of cataract and pseudophakia/aphakia among adults in the United States. Arch Ophthalmol 2004; 122: 487-494. | 5. Rochtchina E, Mukesh BN, Wang JJ, McCarty CA, Taylor HR, Mitchell P. Projected prevalence of age-related cataract and cataract surgery in Australia for the years 2001 and 2021: pooled data from two population-based surveys. Clin Exper Ophthalmol 2003; 31: 233-236. | 6. Keenan T, Rosen P, Yeates D, Goldacre M. Time trends and geographical variation in cataract surgery rates in England: study of surgical workload. Br J Ophthalmol 2007; 91: 901-904. | 7. McCarty CA. Cataract in the 21st Century: lessons from previous epidemiological research. Clin Exp Optom 2002; 85: 91-96. | 8. Bilbao A, Quintana JM, Escobar A, Garcia S, Andrades E, Baré M et al. Responsiveness and clinically important differences for the VF-14 index, SF-36, and visual acuity in patients undergoing cataract surgery. Ophthalmology 2009; 116: 418-424. | 9. Lundqvist B, Monestam E. Longitudinal changes in subjective and objective visual function 5 years after cataract surgery prospective population-based study. J Cataract Refract Surg 2006; 32: 1944-1950. | 10. Tobacman JK, Zimmerman B, Lee P, Hilborne L, Kolder H, Brook RH et al. Visual function impairments in relation to gender, age, and visual acuity in patients who undergo cataract surgery. Ophthalmology 1998; 105: 1745-1750. | 11. Fleming NS. Sociodemographic differences in access to vision care among adults in the United States, 1974-1975. Med Care 1983; 21: 1076-1088. | 12. Parul Desai, Angela Reidy, Darwin C Minassian. Profile of patients presenting for cataract surgery in UK: national data collection. Br J Ophthalmol 1999; 83:893-896. |