PROSPECTIVE STUDY OF CATARACT PREVALENCE IN A TERTIARY CARE HOSPITAL

Alekhya Pabba*1, Manjusha Vanna2

1Department of Pharmacy Practice & 2Department of pharmacology, Malla Reddy College of Pharmacy, Telangana, India.

*Corresponding author e-mail: alekhyapabba@gmail.com

Received on: 02-12-2015; Revised on: 21-12-2015; Accepted on: 28-12-2015

ABSTRACT

Cataract comprise an important health issue and leading cause of blindness in developing countries. This study aims to evaluate the prevalence of cataract by conducting prospective review of patient records in ophthalmology department in Malla reddy hospital, Hyderabad during one year period. Majority of cases were observed in age group between 40 to 60 years (55%). Prevalence of cataract was 62.28 cases per 1225 hospitalizations in ophthalmology department.

Key words: Cataract, Prevalence

INTRODUCTION

Cataract is opacity of normally clear lens. Depending on how dense they are and where they are located cataracts can block the passage of light through lens and interfere with formation of images on retina causing vision to become cloudy. If extensive and progressive cataracts are left untreated they can cause blindness[1]. The WHO/NPCB (National Programme for Control of Blindness) survey has shown that there is a backlog of over 22 million blind eyes (12 million blind people) in India, and 80.1% of these are blind due to cataract. The annual incidence of cataract blindness is about 3.8 million [2]. Cataract is the main cause for 47.8% of blindness in the world. Glaucoma (12.3%), age-related macular degeneration (AMD) (8.7%), corneal opacities(5.1%) and diabetic retinopathy (4.8%) are also important causes of blindness, besides childhood blindness (3.9%),trachoma (3.6%) and onchocercosis (0.8%) [3].

Aging is the primary risk factor for cataracts and other factors involved are gender, family history, overexposure to sunlight, smoking and alcohol use, environmental factors and medical conditions like Diabetes, Autoimmune Diseases and conditions requiring steroid use, Obesity[4].

Awareness about cataract is the primary tool for decreasing the prevalence of cataract. Knowledge about demographics and management of cataract cases is essential as it helps in framing appropriate policies like introducing new guidelines and updating prevailing treatment protocols, counseling the patients on causes and treatment of cataract. The cost to government health-care services of treating cataract patients is probably substantial. It is essential to understand the general and specific interventions and management of cataract as these studies can inform health policy decision making and guide the investment and management at different levels of the health-care system to optimize the use of resources [3]. Hence, this study was carried out with the objective to evaluate the prevalence of cataract in the ophthalmology unit of a tertiary care hospital.
MATERIALS AND METHODS

The study population comprised of all adult patients above the age of 20 years who met the diagnostic criteria for cataract and who were admitted to the ophthalmology unit. The data was collected from 763 cases of cataract on the basis of age and sex during the period of 1 year from January 2014 to December 2014. Data collection was performed according to hospital regulations after approval by the Hospital administration. Statistical analysis was carried out.

RESULTS AND DISCUSSION

In this study, total 763 patients were diagnosed with cataract. Out of them 346 (45%) were male and 417 (55%) were female similar to study conducted by Arnaud Aroujo Filho et al (Fig 1). Ratio of men to women is 1:1.2. The increased prevalence of cataract in women than in men may be due to the influence of hormonal, dietary or social factors. The prevalence of cataract in subjects was found to be 7% in 20-40 age group, 55% in 40-60 age group and 38% in 60-80 age group (Table 1). The increased incidence of cataract was found to be more in age group above 40, which may be due to the comorbidities. The prevalence of cataract in subjects was found to be 7% in 20-40 age group, 55% in 40-60 age group and 38% in 60-80 age group (Table 1). The incidence of cataract in the right eye, left eye and both eyes was found to be 57%, 35% and 8% respectively (Table 2).

CONCLUSION

The increased prevalence of cataract in women suggest that more emphasis should be laid on their eye care as they mostly neglect their health during the daily household chores. The persons with age group above 40 should undergo a thorough eye examination periodically so as to avoid the cataract incidence. A prospective study need to be further carried out to obtain correct estimates of cataract prevalence so that necessary action could be undertaken to decrease the incidence of preventable blindness—the “Cataract”.

ACKNOWLEDGEMENTS

The authors are thankful to the Ophthalmology department, Malla Reddy hospital, Suraram, Secunderabad for providing necessary information.

CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

Figure 1: Gender wise distribution among study subjects

![Gender wise distribution chart](chart.png)
### TABLE 1: AGE WISE DISTRIBUTION AMONG STUDY SUBJECTS

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>% of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-40</td>
<td>21</td>
<td>33</td>
<td>7</td>
</tr>
<tr>
<td>40-60</td>
<td>206</td>
<td>218</td>
<td>55</td>
</tr>
<tr>
<td>60-80</td>
<td>130</td>
<td>154</td>
<td>38</td>
</tr>
</tbody>
</table>

### TABLE 2: EYE-WISE DISTRIBUTION AMONG STUDY SUBJECTS

<table>
<thead>
<tr>
<th>Eye</th>
<th>Number of subjects</th>
<th>% of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>434</td>
<td>57%</td>
</tr>
<tr>
<td>Left</td>
<td>271</td>
<td>35%</td>
</tr>
<tr>
<td>Both</td>
<td>58</td>
<td>8%</td>
</tr>
</tbody>
</table>

### REFERENCES