

## ABSTRACT

### **Profile of Primary Open Angle Glaucoma at a Tertiary Care Eye Hospital**

*Farah Akhtar DOMS, FCPS, Mehmood Ali MBBS, Amtul Aziz DOMS, Muhammad Shoaib MBBS*

**Purpose:** To report the frequency, demographic pattern and clinical profile of primary open angle glaucoma (POAG) at Al-Shifa Trust Eye Hospital, Rawalpindi.

**Design of study:** A hospital based cross sectional observational study.

**Participants:** All the patients aged 40 years and above reporting for the first time at glaucoma clinic of Al-Shifa Trust Eye Hospital, Rawalpindi from 1st July 2006 to 31st December 2007.

**Methods:** Initial screening of all the patients was done at general outpatient department of hospital. All confirmed or suspected cases of glaucoma were referred to glaucoma clinic. After taking history, a detailed ocular examination of all patients including Snellen visual acuity, slit lamp biomicroscopy, applanation tonometry, gonioscopy and a stereoscopic assessment of cup disc ratio (CDR) was performed. In selected subjects, Heidelberg retinal tomography and automated visual field assessment was advised. Individual treatment plan for each eye was made keeping in view the stage of disease, compliance and affordability of the patient. Statistical analysis of the data was done with statistical software SPSS version 13.0.

**Results:** Out of the total 1068 patients aged 40 years and above, primary open angle glaucoma was diagnosed in 403 (37.73% of total) patients. Among these 403 patients, 250 (62.0%) were male and 153 (38.0%) were female. Male to female ratio was 1.63:1. Age of the patients ranged from 40-103 years with a mean age of 60.64years [+/- 12.824 Std. Dev]. Bilateral POAG was found in 334 patients (82.87%). 33 (8%) patients were blind at the time of presentation while 134 (33.25%) patients had a cup disc ratio of 0.8 or more in both eyes. 603 (82.82%) eyes were treated medically, while trabeculectomy was the most common surgical procedure performed in 102 (14.01%) eyes. Majority of the patients belonged to Rawalpindi/Islamabad (43%) and Azad Kashmir (9.3%).

**Conclusion:** POAG is the most frequent type of glaucoma in our population with male predominance. Unfortunately the disease is more advanced at the time of presentation due to lack of public awareness. Despite availability of modern investigations, finding a patient of glaucoma while there is still some useful visual potential to save is still a big challenge for ophthalmologists in Pakistan. *Al-Shifa Journal of Ophthalmology 2008; 4(1): 23-29 © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.*