Clinical Profiles of Patients with Primary Angle Closure Glaucoma in National Eye Centre Kaduna, Nigeria

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Introduction: Primary Angle Closure Glaucoma (PACG) is one of the leading causes of blindness worldwide. Prevalence - 0.46% in India and 1.19% in Japan. Prevalence of 9.2% for Angle closure with/without glaucoma was reported in Nigeria? Elevated Intraocular pressure (IOP) following an Acute primary angle closure (APAC) leads to irreversible glaucomatous optic neuropathy that results in vision loss. Up to 50% of eyes after an APAC episode develop PACG. Emphasis is on preserving the fellow eye from potential risks, especially after an APAC episode. The aim of the study was to assess the clinical profiles of patients with primary angle closure glaucoma.

Methods: The study was an observational retrospective case series involving studying the clinical records of 60 patients (120 eyes) who were managed for primary angle closure glaucoma between January 2015 to January 2017 at National Eye Centre Kaduna. The parameters evaluated were the intraocular pressure (IOP), best corrected visual acuity (BCVA), angle assessment using gonioscopy, standard automated perimetry, initial and the long term intervention.

Results: Sixty patients diagnosed with primary angle closure glaucoma were studied. There were 36 (60%) females and majority of the patients belong to the age group 40-60 years. Only 15% had family history of glaucoma. The commonest symptoms at presentation was blurred vision in 43 (71.7%) patients and 101 eyes of the 60 patients had developed glaucomatous features (PACG). The commonest intervention was laser peripheral iridotomy (PI) in 68 eyes. The mean IOP at presentation was 30.78 ± 13.97 and 30.51 ± 19.18 mmHg in right and left eyes respectively. At last visit, the IOP was 14.79 ± 1.41 and 12.5 ± 4.64 mmHg in right and left eyes respectively. The patients had occludable angles of Shaffer grades

I and II in 77.2% of right eyes and 72.7% of left eyes. The average Mean deviation (MD) was -6.65 \pm 2.22 and -9.05 \pm 1.96 in right and left eyes respectively.

Discussion: There were more females than males in the study which corresponds to the finding in Yuanbo et al in Handan eye study.³ Similar to the findings of Andreatta et al⁴, the IOP was lower in the affected eye at the last follow-up visit. Majority of the eyes had developed glaucomatous features (PACG) just as Andreatta et al⁴ found in their series on APAC in Caucasians, that a longer time to resolve the APAC attack and a higher duration of symptoms correlated with a poorer prognosis. The commonest intervention was laser PI as the efficacy was demonstrated by Singh P et al.⁵

Conclusion: Primary angle closure glaucoma is not rare among our glaucoma patients. Efforts should be made to examine for it in all patients being managed for glaucoma.

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