

The Peculiarities of Glaucoma in Brazzaville

Atipo-Tsiba PW^{1,2*}, Messe Ambia Koulimaya R¹ and Eballe AO³

¹Ophthalmology Department, University Hospital of Brazzaville, Congo

²Faculty of Health Sciences, Marien Ngouabi University of Brazzaville, Congo

³Ophthalmology Department, Laquintinie Hospital of Douala, Cameroon

***Corresponding Author:** Atipo-Tsiba PW, Associate Professor in Ophthalmology, Marien Ngouabi University of Brazzaville and Head of Ophthalmology Department, University Hospital of Brazzaville, Congo.

Received: January 02, 2019; **Published:** January 24, 2019

Abstract

Introduction: The expression of glaucoma varies from one region to another. Some of its clinical aspects predominate in one population rather than another. The purpose of this survey was to identify some peculiarities of glaucoma in Brazzaville.

Materials and Methods: Mini analysis from five of our articles published in 2016 and 2017 in *East African Medical Journal and Health Science and Diseases*.

Results: 289 patients had been seen. The average age was 46.4 years with a sex ratio of 1.8. POAG accounted for 90.6% of all clinical forms. Secondary glaucoma was the consequence of retinal ischemia related to diabetes mellitus in 80.5% of cases. Patients' knowledge of glaucoma was considered poor in 88% of cases, as was adherence to treatment in 76% of cases. The non-improvement of clinical signs (75.70%) was the main reason for changing Ophthalmologist. In 80% of cases the patients had estimated the treatment too expensive. The average duration of follow-up by the same Ophthalmologist was 7 months. The average duration of treatment discontinuation between two Ophthalmologists was 3 months.

Conclusion: Glaucoma is poorly known in Brazzaville. Its main clinical form is POAG. The patient often changes the doctor seeking complete healing, resulting in frequent treatment stops.

Keywords: *Glaucoma; Diabetes Mellitus; Treatment; Observance*

Introduction

The anatomical lesions of the optic nerve associated with glaucoma depend on several factors, among others, the anteroposterior diameter of the eye, the degree of opening of the iridocorneal angle and the circulation of the aqueous humor. These different factors will affect the clinical expression of glaucoma that varies from one region to another. Some clinical aspects predominate in one population rather than another [1-3]. This explains, for example, the predominance of primitive angle-closure glaucoma in the Asian population, whereas the primitive open-angle form predominates in Africa [2-4]. This work aimed to list some peculiarities of glaucoma in Brazzaville.

Materials and Methods

This was a mini analysis from five of our articles published in *East African Medical Journal and Health Science and Diseases* in 2016 and 2017.

The studies were conducted in the Ophthalmology department of the Brazzaville University Hospital. This service is the largest in the whole country. Brazzaville is the political capital of Congo. These publications were as follows:

1. Atipo-Tsiba PW, Eballe AO, Diomandé IA, Ebana S. Glaucoma: the difficulties related to its management in Brazzaville. *East Afr Med J.* 2016;93(12):44-46.
2. Atipo-Tsiba PW, Noa G, Ebana S, Diomande IA, Nomo A, Nomo C, Tapsoba Y. Glaucome Néovasculaire à Brazzaville: Étiologies et Difficultés de la Prise en Charge. *Health Sci. Dis.* 2016;17(2):63-66.
3. Atipo-Tsiba PW, Eballe AO, Diomandé IA. The path of patient with chronic open angle glaucoma. *East Afr Med J.* 2017;91(1):1-3.
4. Atipo-Tsiba PW, Dohvoma VA, Ombwa Eballe A, Diomandé AI, Ebana S. Aspects Épidémiologiques et Cliniques du Glaucome au CHU de Brazzaville. *Health Sci. Dis.* 2017;18(1):70-72.
5. Atipo-Tsiba PW, Ombwa Eballe A, Dohvoma VA, Diomandé AI, Ebana S. Connaissances des Médecins Généralistes sur le Glaucome Chronique à Angle Ouvert à Brazzaville. *Health Sci. Dis.* 2017;18(2):80-82.

Results

The overall number of patients seen was 289. The mean age was 46.4 years [1 year - 86 years], with a sex ratio of 1.8. The different types of glaucoma are represented by figure 1. Secondary glaucomas were neovascular and traumatic, their distribution is shown in table 1. Table 2 shows patients' level of knowledge of glaucoma, their degree of adherence to treatment and their opinion about the cost of treatment. In 75.70% of cases patients changed treatment due to non-improvement of symptoms and in 24.30% for worsening of clinical signs. The average duration of follow-up by the same Ophthalmologist was 7 months [3 months - 12 months]. The average duration of treatment discontinuation between two Ophthalmologists was 3 months [1.5 month - 7.5 months].

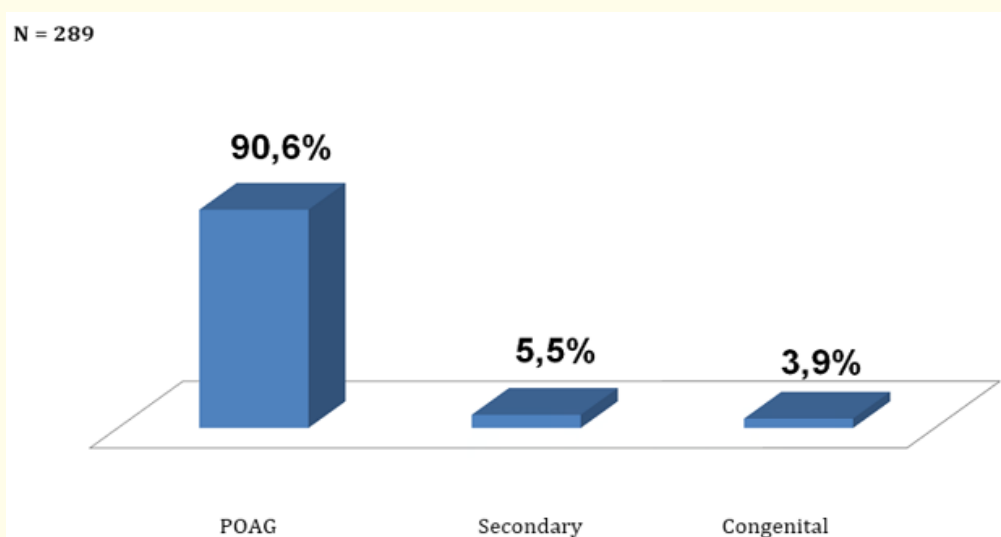


Figure 1: Types of glaucoma seen at Brazzaville University Hospital between 2016 and 2017.

Type of glaucoma	Effective	Frequency %
Noe vascular glaucoma - Diabetes	29	80.5
Noe vascular glaucoma - OCVR	4	11.1
Cyclodialysis	3	8.4
Total	36	100

Table 1: Types of secondary glaucoma seen at Brazzaville University Hospital between 2016 and 2017.

Neo vascular glaucoma - Diabetes: Neo vascular glaucoma due to diabetes mellitus.

Neo vascular glaucoma - OCVR: Neo vascular glaucoma due to occlusion of the central vein of the retina.

Level of knowledge	Poor	88%
	Good	12%
Adherence to treatment	Poor	76%
	Good	24%
Cost of treatment	Expensive	80%
	Affordable	20%

Table 2: Level of knowledge of glaucoma by patients, their degree of adherence to treatment and their opinion on the cost of treatment at Brazzaville University Hospital, between 2016 and 2017.

N = 125.

Discussion

Glaucoma has been diagnosed at any age. Congenital forms within 3 months of birth with juvenile and adult forms that were the essential of the patients examined. This observation is confirmed by data from the literature [1,3-5]. POAG was the main clinical form encountered with a prevalence of more than 90%. Studies in Ethiopia, Ghana, Nigeria and Tanzania reach the same conclusion [4,6-8]. This is a silent and serious illness. In its asymmetrical form the diagnosis is often made at the stage of blindness for the most affected eye. The expression of a complaint (visual blur, amputation of the visual field, colored halos...) almost always translates a severe anatomical attack of the optic nerve [1-3,9]. Hence the importance of screenings in families at risk, but also a systematic examination of the fundus (undilated patient) during routine consultations for prescribing of glasses for presbyopia.

Secondary forms were dominated by neovascular glaucoma complicating retinal ischemia due to diabetes mellitus. This observation is the same both in Africa and elsewhere in the world [8,10,11]. Ophthalmological monitoring of diabetic patients remains a concern. The majority of these patients do not even know that diabetes mellitus has eye complications [12]. They are usually seen in consultation for a decrease in visual acuity. At this stage the examination often highlights either severe diabetic retinopathy or neo-vascular glaucoma difficult to manage in our context of resource-limited countries. Closer collaboration with diabetologists is essential.

The majority of patients did not know glaucoma, the finding is the same for some authors in Africa and in other parts of the world [2,6-8]. Some of our patients had a hard time pronouncing the word "glaucoma", for most of them it was the first time to hear this word "complicated".

The explanation given by the Ophthalmologist that this is an incurable disease is not accepted by the majority of patients. The explanation for this refusal is probably related to African anthropology. Indeed in Africa a so-called "incurable" disease is most often equated with a "bad spiri". This situation results in doctor changes, treatment stoppages and exorcism consultations.

The cost of drugs was another limiting factor in adherence to treatment. This observation is also made by some African authors [9,10,13]. Glaucoma requires treatment for life. Poverty and the absence of social security are real obstacles in the follow-up of glaucomatous patients in Brazzaville and in Africa in general.

Conclusion

Glaucoma is poorly known in Brazzaville. This explains the change of doctor in the hope of a complete cure, thus causing frequent stops of treatment. Its main clinical form is POAG, which often starts around age 40. Hence the need on the one hand information campaigns, on the other hand the systematic examination of the fundus (unexpanded patient) to assess the optic disc when consulting glasses for presbyopia.

Bibliography

1. Gupta D and Chen PP. "Glaucoma". *American Family Physician* 93.8 (2016): 668-674.
2. Adekoya BJ., et al. "Challenges in the management of glaucoma in a developing country, a qualitative study of providers perspectives". *Nigerian Journal of Medicine* 24.4 (2015): 315-322.
3. Santos MA., et al. "Compliance with medical treatment in primary open-angle glaucoma in Lomé". *Journal Français D'Ophthalmologie* 39.5 (2016): 459-466.
4. Abdull MM., et al. "Primary open angle glaucoma in northern Nigeria: stage at presentation and acceptance of treatment". *BMC Ophthalmology* 15 (2015): 111.
5. Osman EA., et al. "Compliance of Glaucoma Patients to Ocular Hypotensive Medications Among the Saudi Population". *Journal of Ocular Pharmacology and Therapeutics* 32.1 (2016): 50-54.
6. Mehari T., et al. "Level of adherence to ocular hypotensive agents and its determinant factors among glaucoma patients in Menelik II Referral Hospital, Ethiopia". *BMC Ophthalmology* 16 (2016): 131.
7. Ocansey S., et al. "Cost of the medical management and prescription pattern for primary open angle glaucoma (POAG) in Ghana-a retrospective cross-sectional study from three referral facilities". *BMC Health Services Research* 16 (2016): 282.

8. Gilmour-White JA, *et al.* "Glaucoma awareness and access to healthcare: perceptions among glaucoma patients in Tanzania". *Postgraduate Medical Journal* 91.1077 (2015): 373-378.
9. Lemij HG, *et al.* "Patient satisfaction with glaucoma therapy: reality or myth?" *Clinical Ophthalmology* 9 (2015): 785-793.
10. Abu Hussein NB, *et al.* "Analysis of Factors Affecting Patients' Compliance to Topical Antiglaucoma Medications in Egypt as a Developing Country Model". *Journal of Ophthalmology* (2015): 234157.
11. Do AT, *et al.* "Effectiveness of Glaucoma Counseling on Rates of Follow-up and Glaucoma Knowledge in a South Indian Population". *American Journal of Ophthalmology* 163 (2016): 180-189.
12. Atipo-Tsiba PW, *et al.* "Eye and diabetes: evaluation of patients' knowledge level in Brazzaville". *East African Medical Journal* 93.10 (2016): 11-13.
13. Nayak B, *et al.* "Socioeconomics of long-term glaucoma therapy in India". *Indian Journal of Ophthalmology* 63.1 (2015): 20-24.

Volume 10 Issue 2 February 2019

©All rights reserved by Atipo-Tsiba PW., *et al.*