

Challenges of Retinoblastoma Management in a Nigerian Tertiary Eye Care Facility

Musa KO¹, Oluleye TS², Rotimi-Samuel A¹, Aribaba OT¹, Olowoyeye AO¹, Adenekan OA¹, Ilo OT¹, Onakoya OA¹ and Akinsola FB¹

¹Guinness Eye Center, Lagos University Teaching Hospital, Lagos (LUTH)

²Retina and Vitreous Unit, Department of Ophthalmology, University College Hospital, Ibadan
Corresponding author: Musa KO, Email: musa_kareem@yahoo.com

Introduction: Retinoblastoma is the most common primary intraocular tumor of childhood^[1]. As a result of advances in treatment and early presentation, survival of retinoblastoma is >90% in developed countries^[2]. Globe-preserving treatment modalities have therefore become the trend in recent years^[3]. In developing countries, the survival of patients with retinoblastoma is much lower^[4]. This study aims to present the clinical profile and treatment outcome of patients with retinoblastoma managed at Guinness Eye Centre, Lagos University Teaching Hospital highlighting the challenges with a view to improving the management of the disease.

Methods: Retrospective chart review of patients diagnosed with retinoblastoma between January 2012 and December 2015. Data obtained from case files of patients include demographic characteristics, presenting complaint, laterality of disease, tumor stage using the International Intraocular Retinoblastoma Classification^[5], treatment and outcome. Data analysis was done using the Statistical Package for Social Sciences (SPSS) version 20 (IBM Corporation 2011).

Results: The review included 54 eyes of 41 patients between the ages of 2 months and 5 years (Figure 1). The mean age at presentation was 24.4 ± 11.4 months. There were 18 males

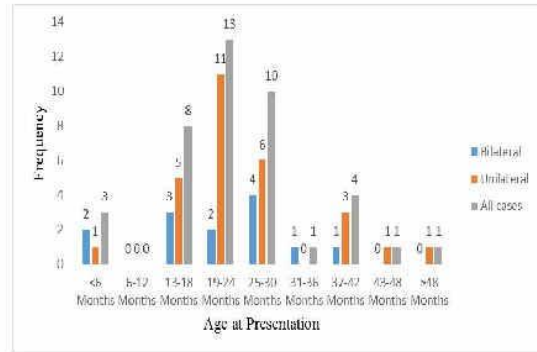


Fig. 1: Distribution of Age at Presentation and Laterality

Table 1: Retinoblastoma grading at Presentation

Retinoblastoma staging	Frequency	Percentage (%)
Group A	1	1.8
Group B	2	3.7
Group C	6	11.1
Group D	16	29.7
Group E	15	27.8
Orbital disease	13	24.1
Metastatic disease	1	1.8
Total	54	100

and 23 females. Time between onset of symptoms and clinical presentation ranged from 2 weeks to 2 years and 2 months. Tumour was bilateral in 13(31.7%) patients and unilateral in 28(68.3%). Leukocoria was the most common presenting complaint observed in 32(59.2%) eyes followed by proptosis in 12(22.2%). Groups D and E were the most common intraocular tumor stage documented in 16(29.7%) and 15(27.8%) respectively (Table 1). Most patients 30(73.3%) defaulted from treatment after the first presentation. Chemotherapy was commenced in 8 patients but the recommended 6 courses were completed in 4 (50.0%) patients.

Discussion/Conclusion: Delay in seeking healthcare is a major challenge as patients then present with advanced disease. This was due to the following reasons: parents did not know that the glowing of the eye was a problem until other ocular symptoms developed, parents preferred to seek alternative healthcare at religious homes or traditional healers at onset of symptoms and financial constraints. Because of the high rate of advanced disease, enucleation was the main treatment option. However fear of enucleation results in a high rate of default as most patients refuse to take up this treatment option. In conclusion, late presentation of retinoblastoma with advanced disease was frequent making globe salvage difficult. Fear of enucleation and financial constraints are major impediments to treatment adherence.

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