Histopathological Profile of Orbito-ocular Lesions at Tertiary Hospital in Northern Malawi

CURRENT STATUS: POSTED

Frank Watson Sinyiza
Mzuzu Central Hospital

✉ frasinyiza@yahoo.com *Corresponding Author*
ORCID: <https://orcid.org/0000-0002-5009-4012>

Alfred Kayira
Mzuzu Central Hospital

Master R.O. Chisale
Mzuzu Central Hospital, Mzuzu University

Chikondi Sharon Chimatata
Mzuzu Central Hospital

Paul Uchizi Kaseka
Mzuzu Central Hospital

Pocha Samuel Kamudumuli
University Research Company, (URC)- Malawi Project

Tsung-Shu Joseph Wu
Pingtug Christian Hospital

Balwani Chingaticifwe Mbakaya
St John's Institute for Health

DOI:

10.21203/rs.2.22129/v1

SUBJECT AREAS

Ophthalmology

KEYWORDS

Orbito-ocular tumours, squamous cell carcinoma, Retinoblastoma

Abstract

Background

Orbito-ocular lesions are common cause of morbidity and mortality in our population yet, there is paucity of data on their pattern which is crucial for developing an effective strategy for prevention, timely detection and management. This study sought to describe the burden and histopathological pattern of orbito-ocular lesions at Mzuzu Central Hospital (MCH) over a period of five years (July 2013 to June 2018).

Methods

A retrospective review of the clinicopathological profile of orbito-ocular lesions diagnosed at MCH was done. Demographic, clinical and histopathological data was obtained from original histology reports. Data analysis was conducted using Stata, version 13.0 (Stata Corp. LP, College Station, TX, United States of America). Descriptive analyses were performed to summarize patients' sociodemographic and clinical characteristics, and histopathological analysis results.

Results

Two hundred and fourteen (214) patients' records of orbito-ocular lesions were reviewed. Patients were predominantly females 60.3%. The overall mean age was 34.81 ± 15.93 years. Conjunctiva was the most common site of orbito-ocular lesion accounting for 65.0% of the cases. This was followed by lid and adnexa (16.4 %) and intraocular lesions (9.3 %). Malignant lesions were the most prevalent (39.3%), followed by degenerative conditions (25.2%), other benign lesions (15.0%), Conjunctival Intraepithelial Neoplasia (CIN) (8.4%), pyogenic and inflammatory conditions (8.4 %). The burden of cancer among males was 45.9% while in female was 34.9%. Malignant lesions were common in HIV infected patients 64.1%. There was bimodal distribution of orbito-ocular malignancies, one in the first decade of life and the other in third and fourth decade of life. Among cancers cases (84), squamous cell carcinoma, retinoblastoma, Kaposi Sarcoma and lymphoma contributed to 82.1%, 8.3%, 2.4% and 1.2% respectively. Kaposi sarcoma was found only in patient with HIV infection.

Conclusion

Cancer constituted a substantial proportion of orbito-ocular lesions in our study population with

squamous cell carcinoma being the most common malignancy in adults and retinoblastoma in children. Degenerative disease contributed a high proportion of non-malignant lesions. Therefore, there is need for appropriate strategies to improve preventive, diagnostic and management capacity for orbito-ocular lesions at MCH.

Full Text

Due to technical limitations, full-text HTML conversion of this manuscript could not be completed. However, the manuscript can be downloaded and accessed as a PDF.

Figures

Figure 1

Processes involved in specimen processing at KCH/UNC laboratory