REGRESSION OF OCULAR HODGKIN’S LYMPHOMA IN A 13-YEAR-OLD

Case Report

By: *C Kalukali 1,2, K I M Muma 1,3
1Department of Ophthalmology, School of Medicine and Clinical Sciences, Levy Mwanawasa Medical University, Lusaka, Zambia
2Chongwe District Hospital, Chongwe, Zambia
3University Teaching Hospitals – Eye Hospital, Lusaka, Zambia
*EMAIL ADDRESS: Cecilia Kalukali: ceciliakalukali@gmail.com

ABSTRACT

An increasing number of cases of ocular non-Hodgkin’s lymphoma (HL) is being reported. While ocular involvement in Hodgkin’s lymphoma is rare, it is a frequent affection in non-Hodgkin’s lymphomas (NHL). A 13-year-old boy presented to Chongwe District Hospital (CDH) with pan uveitis. The patient presented with blurred vision in his Left Eye (LE), skin rash and dry cough over a period of three months. He had not sought any medical attention prior to his visit to eye unit. Slit lamp examination revealed bilateral non-granulomatous keratic precipitates and flare. Physical examination revealed cervical and inguinal lymph nodes. His laboratory work up including rheumatoid factor and serum protein electrophoresis tests were all normal. A diagnosis of pan uveitis was made and the patient was treated with topical and systemic steroids over a period of six months without improvement. The patient was counselled and referred to a pediatrics hospital where an excisional biopsy for inguinal lymph nodes confirmed Hodgkin’s lymphoma. Appropriate systemic treatment was given for Hodgkin’s lymphoma.

INTRODUCTION

Hodgkin’s lymphoma (HL) is a disease originating from lymphoid tissue and accounts for less than 1% of all cancers [1]. As lymph nodes are distributed throughout the body, lymphomas may manifest with involvement of various body parts [2]. This can cause difficulties in diagnosis as well as delayed treatment. Ocular involvement is more prevalent in non-HL compared to HL [3]. A number of case reports of ocular HL following the diagnosis of systemic HL have been documented [4, 5, 6]. Though rare, HL can initially present with ocular manifestations [7, 8]. According to 2016 revision of the World Health Organization (WHO) classification of lymphomas, approximately 15% of lymphomas are classified as HL; the remainder are classified as Non-HL [9]. This recognizes >40 mature B cell neoplasms and <25 mature T and NH (natural killer) cell neoplasms [9].

CASE SCENARIO

A 13- year-old male patient presented with skin rash, dry cough, and reduced vision in his left eye for 3 months. There was history of the child being sickly of more than 3 months, weight loss, no night sweats and could not attend school due to illness. This was the first presentation to the hospital and was not on any treatment. On general examination the child was ill looking, febrile, pale, slightly jaundiced, not cyanosed, had no finger clubbing and was not breathless. Head and neck examination showed a buffalo face appearance. Systemic examination revealed multiple cervical and inguinal lymphadenopathy bilaterally. On ocular examination, visual acuity was 6/6 Right Eye (RE), 6/36 Left Eye (LE), bilateral non-granulomatous keratic precipitates (KPs) and grade two flare. The KPs were more pronounced in the LE. Fundus examination was normal in the RE, while macula edema and vitritis were observed in the LE, though there was no vitreous turbidity. His laboratory investigations, which included rheumatoid factor, serum protein electrophoresis and other tests were all normal. A diagnosis of chronic posterior uveitis secondary to HL was made and ocular treatment was initiated, and the child was referred to the paediatric hospital where the excisional biopsy of the inguinal lymph nodes was done. The histology results confirmed the HL diagnosis and the patient was commenced on appropriate management. The child was followed up for a period of one year and the HL resolved including the uveitis. Currently the child is on permanent follow up with the children’s hospital and the eye unit at CDH. Considering that the patient is under the age of 18, the mother consented for publication.

DISCUSSION

HL is usually seen in individuals aged 15-34 years and those over 55 years old [1]. The child reported in this case was 13 years old demonstrating that HL can still occur in children younger than 15 years. The incidence of pediatric HL tends to rise as family size increases and socioeconomic status decreases; the opposite has been reported with the adult form, which is associated with high socioeconomic status in industrialized nations [10]. The child discussed in this report was the sixth born and came from a poor socioeconomic status justifying the incidence occurrence. Although HL is more prevalent among males in all age groups, the nodular sclerosis subtype is more common among females [10]. This is consistent with what has been reported as the victim is male child. Unlike most other cancers, HL can be cured through a combination of medical management. Towler et al., 1999, reported achieving complete remission of ocular inflammation with chemotherapy [8, 11] just as the child in this case was treated successfully. Ocular involvement in HL occurs by various mechanisms including direct lymphomatous or metastatic involvement of the choroid and the retina; paraneoplastic vasculitis; and iatrogenic complications.
arising from HL treatment or immunosuppression [5-7, 12]. In this case, the child was not immunosuppressed and could have been metastatic. These patients may exhibit infiltration of the ocular structures, retinal periphlebitis, focal chorioretinitis, vitritis, papillary edema, exudative retinal detachment, soft exudates, retinal hemorrhages, necrotizing retinitis, peripheral retinal exudates, and retinal white spots [3, 13]. The child under discussion exhibited with vitritis and macular edema just as described above.

CONCLUSION
This case demonstrates the occurrence of ocular Hodgkin’s Lymphoma despite it being rare. It also highlights the fact that ocular Hodgkin’s Lymphoma can occur in younger age. Hodgkin’s Lymphoma is treated with successful remission.

LIST OF REFERENCES