Retinoblastoma Masquerading as Spontaneous Hyphaema in a Nigeria Infant

Abstract: Retinoblastoma is the most common intraocular malignancy of children and occurs mostly within the first 3 years of life with an average onset at about 18 months of age. The most common form of presentation is leukocoria, other less common forms of presentation includes strabismus, uveitis, proptosis, orbital cellulitis and hyphaema being one of the least forms of presentation. This is a case report of Retinoblastoma presenting with hyphaema in a Nigerian Infant and it is to bring to fore that even though hyphaema is not a common form of presentation in patients with Retinoblastoma, it should still not be overlooked in order to avoid the poor prognosis that is often associated with late diagnosis.

Keywords: Retinoblastoma, Hyphaema, Intraocular malignancy.

INTRODUCTION
Retinoblastoma is the most common intraocular malignancy of childhood worldwide (Dimaras, H. et al., 2012). It accounts for 2.5 to 4% of all paedriatric cancers (Rodriguez, & Galindo. 2015).

The most common presentation is leukocoria (Chawla, B. et al., 2016; Singh, U. et al., 2018; & Pandey, A. N. 2014) other notable but less common presentation includes strabismus, uveitis, proptosis, orbital cellulitis and hyphaema (Singh, U. et al., 2018; Pandey, A. N. 2014; Soliman, S. E. et al., 2017; & El Zomor, H. et al., 2015).

This case report is to bring to fore that even though hyphaema is not a common form of presentation of Retinoblastoma, it should still not be overlooked in order not to cause delay in diagnosis that can jeopardise the life of the patient.

CASE HISTORY:
A seven month old female infant was brought by her mother to our Eye Clinic in Ekiti State University Teaching Hospital on 27th October 2019 with complaints of redness of her left eye since birth and 3 days history of watering of the same eye. There was no discharge and no antecedent history of trauma to the eye, there was fever of 3 days duration.

The baby was a product of full term normal delivery and the 4th child of both parents, the father was a 35 years old carpenter while the mother was a 30 years old trader. There was no similar history among the siblings or any of the family members.

On examination, the baby was healthy looking with no physical abnormality, she was febrile to touch (temperature 37.6°C) not pale, anicteric and no lymphadenopathy.

On ocular examination, the baby was observed not to be following light, there was minimal Nystagmus, the right eye was quiet, and the cornea was clear and no megalocornea. Anterior chamber was normal in depth and clear, the pupil was small in size, round and active, no obvious leukocoria.

The left eye was moderately injected and no tell-tale sign of injury to it, cornea was clear and no megalocornea, there was total hyphema with no further view of the pupil and other anterior segment structures, the digital tonometry felt normal.
An impression of spontaneous Hyphaema was made, to still consider traumatic hyphaema and to keep in view retinoblastoma.

The patient was placed on Gutt Ciprofloxacin 6 hourly, Gutt Dexamethazone 6 hourly, Gutt Tropicamide 12 hourly to the left eye and vitamin C syrup 5ml 8 hourly.

She was referred to the paediatric Department for the fever and given a week appointment for Re-evaluation of the eyes under sedation.

On the scheduled appointment day, the child was dilated with Gutt tropicamide and gutt phenylephrine. She was sedated with 5mg of intravenous Diazepam injection.

On ocular examination under sedation, the hyphaemia in the left eye had cleared leaving a complicated cataract with no view of the fundus while the right eye showed an obvious leukocoria (Figures 1 & 2).

Fundoscopy of the Right eye revealed a white fluffy lesion with prominent tortuous vessels in the temporal Retina.

An assessment of Bilateral Retinoblastoma was made and the baby was referred to another tertiary Hospital that has both occuloplatic surgeon as well as an oncologist after counselling the parents.

The parents were seen with the baby few months later and they gave a verbal report that the baby’s left eye was removed which was obvious on gross examination, they also gave information that the baby was also placed on both radiotherapy and chemotherapy and was still on follow up appointment at the hospital where she was referred to.

The parents were given appointment for follow up and further examination in our clinic but never showed up again.

**Figures 1 & 2:** Pictures showing the Leukocoria in the Right eye and cataract in the left eye

**DISCUSSION:**

In this case report, spontaneous hyphaema was the presenting sign of Retinoblastoma.

In most studies (Chawla, B. et al., 2016; Singh, U. et al., 2018; Pandey, A. N. 2014; Soliman, S. E. et al., 2017; & El Zomor, H. et al., 2015), leukocoria was the main presenting sign followed by strabismus and proptosis with hyphaema been uncommon (Singh, U. et al., 2018; Pandey, A. N. 2014; Soliman, S. E. et al., 2017; El Zomor, H. et al., 2015; Reddy, S. C., & Anusya, S. 2010; Zhao, J. et al., 2011; Essuman, V. et al., 2010; & Badhu, B. et al., 2005). Of the series reported by (Singh, U. et al., 2018; Pandey, A. N. 2014) only 1% presented with hyphaema while none was reported by (Soliman, S. E. et al., 2017; El Zomor, H. et al., 2015).
This case is also unusual again in the sense that Retinoblastoma is not usually seen before the 1st birthday. It is usually seen in children between the ages of 1 year and 3 years with the average age of 18 months at presentation, it is not unlikely that this child has been harbouring the Retinoblastoma prenatally since the symptoms of redness of her left eye dates back to birth.

CONCLUSION:
There is need to have a high index of suspicion for Retinoblastoma in children less than 3 years old whenever they present with spontaneous hyphaema, this will go a long way in ensuring early diagnosis and prompt management, thus reducing the high mortality that often results from late management of this highly malignant ocular tumour.

REFERENCES: