

From one eye to another: metachronous retinoblastoma unravelled

Jaya Selan Rajendran, Sangeetha Tharmathurai, Norhafizah Hamzah

Department of Ophthalmology, Hospital Tunku Azizah, Kuala Lumpur, Malaysia

ABSTRACT

Metachronous retinoblastoma is a rare occurrence. It refers to an asynchronous tumour development in the eyes of individuals with a history of retinoblastoma. A 1-month-old boy presented with leukocoria in the left eye (LE) at 6 weeks of age. There was presence of LE relative afferent pupillary defect (RAPD) and no response to light. Anterior segment examination of the left eye revealed leukocoria and 360-degrees of rubeosis iridis. Fundus examination showed a vascularised retinal mass occupying the entire vitreous cavity and obscuring the optic disc. Ultrasound biomicroscopy showed mass touching ciliary body. The right eye (RE) was normal. Magnetic resonance imaging orbit revealed no enhancement along the retrobulbar or optic nerve regions. He was diagnosed with Group E retinoblastoma in the LE and enucleation was promptly performed. Histopathological examination confirmed no evidence of high-risk histopathological risk factors. Five weeks post-enucleation of LE, a retinal mass measuring one-eighth of the optic disc size was noted superior-nasally in the RE. The mass was treated with local laser therapy. Patient was given four` cycles of systemic chemotherapy. Subsequent monitoring showed no progression of the disease in the child. Timely recognition and management of metachronous retinoblastoma in young children are critical for vision preservation and optimal outcomes.