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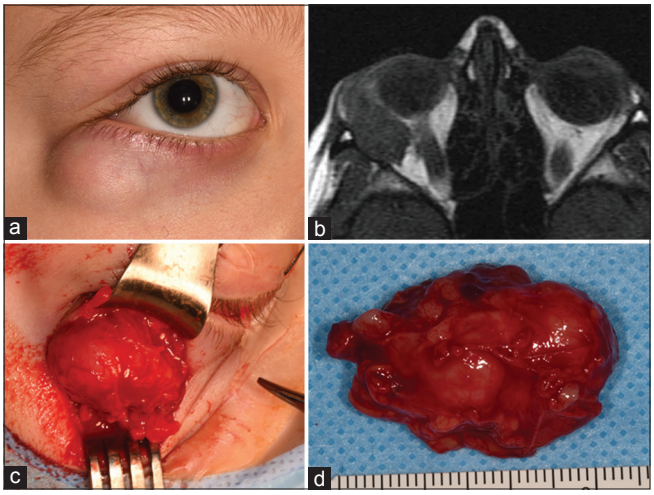
Lower eyelid pseudochalazion in a child

Case Report

A 10-year-old Caucasian male noted swelling of his right lower eyelid, enlarging over 2 weeks. He denied pain or trauma. On presentation elsewhere, an eyelid chalazion was suspected and treated with warm compresses for one week with no response. He was referred for evaluation to rule out hemorrhage, inflammation, or malignancy. On examination, visual acuity was 20/20 in the right eye (OD) and left eye. There was a painless, rubbery, subcutaneous mass with blue color, pushing the globe OD superiorly [Fig. 1a]. Mild right lower eyelid swelling and resistance to retropulsion were noted. Ocular motility was free and full in all directions. Rest of the globe were otherwise normal.

What is your next step?

A. Close monitoring with serial examinations every 3 months for 1 year, then yearly
B. Order orbital magnetic resonance imaging (MRI) with and without contrast, then consider biopsy
C. Corticosteroid injection
D. Interferon injection [Fig. 1a-d].



Results

MRI disclosed a solid mass in the inferotemporal orbit along the orbital rim, without bone erosion. Lateral rectus and inferior oblique could not be made out separately from the mass [Fig. 1b]. Surgical excision was performed through a lower eyelid crease incision for attempted complete removal of the mass preserving the extraocular muscles. The pseudoencapsulated mass measured 35 mm × 35 mm × 30 mm [Fig. 1c and d]. Histopathology confirmed Group II orbital rhabdomyosarcoma, embryonal type, with microscopic residua. The patient was managed with chemotherapy and radiotherapy for microscopic remnants as per the protocol.

Diagnosis: Orbital rhabdomyosarcoma (Group II) OD.

Correct answer: B.

Discussion

Orbital rhabdomyosarcoma is a malignancy that is believed to arise from pluripotential mesenchyme in the orbit that normally differentiates into striated muscle. This malignancy comprises 4% of all pediatric malignancies, 10% of those primarily occurring in the orbit.[1,2] This malignancy classically presents with fairly rapidly progressive proptosis and globe displacement in a child, usually in the preteen age group. Management involves surgical excision for staging, followed by chemotherapy (vincristine, dactinomycin, and cyclophosphamide) and radiotherapy. Analysis of the intergroup rhabdomyosarcoma studies III and IV regarding outcomes for orbital involvement reported a failure-free survival rate of 90%.[3] The prognosis with orbital rhabdomyosarcoma has greatly improved over the past 40 years.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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