IMAGES IN CLINICAL PRACTICE

Figure 1: Greyish white nodular lesion along upper limbal region in left eye

EYE LESION AND TUBERCULOSIS

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A six year old female presented with photophobia with increased lacrimation in the left eye for 1 month without any constitutional symptoms. Ophthalmologic examination revealed marked circumcorneal congestion and a single greyish white nodular lesion with a leash of blood vessels extending to the limbus in the left eye (figure 1). There was marked blepharospasm, photophobia and excessive lacrimation. Visual acuity was normal in both eyes. On general examination, she had mild pallor and right sided non matted cervical lymphadenopathy measuring 3 ×2 cm. Systemic examination was normal. Hemogram, liver and kidney function tests and stool examination were within normal limits. Mantoux test (1 TU unit) was 19 mm after 48 hours. Bacterial culture from lid margin and conjunctiva were sterile. Fine needle aspiration cytology from the cervical lymph node showed epitheloid granuloma and acid fast bacilli on Ziehl-Neelsen staining but no growth on culture. The child was started on anti-tubercular therapy. Topical steroid and antibiotic eye drops were prescribed. There was complete resolution of eye lesions with residual corneal micro opacities.

What is the eye lesion?

Phlyctenular keratoconjunctivitis (PKC). It is a type IV cell mediated hypersensitivity reaction to endogenous microbial proteins in the cornea and/or conjunctiva, to a variety of antigens and is mostly unilateral with a strong female preponderance. (1-3) It is relatively more common in the pediatric age group in association with pulmonary and lymph node tuberculosis. (1) Many antigens like staphylococcal products, worm infestation, fungi, viruses, and parasites can cause it but the main antigen responsible for PKC is tuberculoprotein. (2,3) PKC is a nodular affliction characterized by the formation of a small circumscribed lesions at the corneal limbus. (4) Conjunctival phlyctens are usually transient and asymptomatic but corneal lesions present with lacrimation, photophobia and blepharospasm and may leave residual opacities leading to permanent vision impairment. (5) PKC may be a presenting feature in a patient without any systemic tuberculosis symptoms. (3) PKC lesions are observed to be more severe and recurrent in patients with tuberculosis especially with pulmonary tuberculosis and tubercular lymphadenopathy. (5) Topical corticosteroids and local antibiotics are considered as the best options for PKC. A routine ophthalmological evaluation in all patients with tuberculosis will help in early diagnosis and timely institution of local treatment of PKC.

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