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Solitary Juvenile Xanthogranuloma of the Upper Eyelid

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Abstract **Case Report**

We report a case of solitary subcutaneous juvenile xanthogranuloma involving the upper eyelid, without any other cutaneous or systemic lesions. The diagnosis of juvenile xanthogranuloma is based on characteristic clinical features and confirmed by histopathology.

Keywords: Juvenile xanthogranuloma.

INTRODUCTION

Juvenile xanthogranuloma (JXG) is predominantly a skin disorder of young children [1-8]. The incidence is unknown but has been reported to represent 0.5% of all pediatric tumors. JXG may present at birth (5–17% of cases) or in the first year of life (40–70% of cases). JXG is characterized by one or more cutaneous nodules, and less often by additional lesions in deep soft tissue and organs. Histopathologically, a mixture of histiocytes, giant cells, including of the foreign-body and Touton types, and inflammatory cells characterize JXG. Extracutaneous involvement is usually restricted to the eye area. Ocular involvement of JXG includes the orbit, eyelid, conjunctiva, limbus, uvea, retina, and optic disc. Although mainly a cutaneous lesion, some rare cases have been reported as pure subcutaneous lesions. However, few cases have been reported to involve the eyelid [2-8].

We describe a case of an isolated subcutaneous JXG located in the upper eyelid without any additional cutaneous or systemic nodules in a 2-year-old boy.

CASE REPORT

A 2-year-old boy was referred to our hospital for a 6-month history of a left upper lid tumor. His mother had no complications in pregnancy or delivery, and his medical history was unremarkable. On examination, his visual acuity was 0.7 in each eye. Extraocular motility and alignment were normal. In both eyes, the conjunctiva, sclera, and cornea were normal. The anterior chamber in both eyes was unremarkable. There was no lesion of the iris in either eye. The media were clear, and fundus examination results were normal in both eyes. His left eyelid was remarkable for the presence of an 8×6×7 mm reddish yellow, elastic hard, solitary nodule that was present on the middle part of the left upper eyelid (Figure 1 arrow). The eyelashes were thinned or absent over the lesion. No skin nodules or eruptions were identified anywhere else.

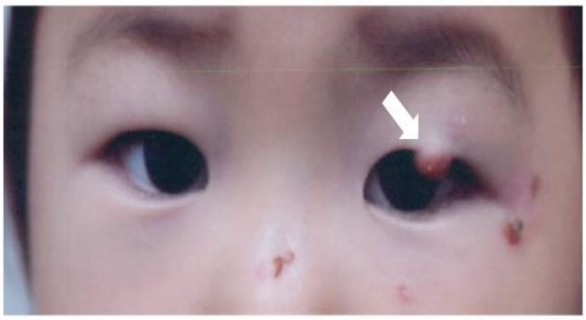

Fig-1: Photograph of the patient's eye lid.

Note relatively large (8×6×7 mm) and reddish yellow solitary nodule in the left upper eyelid margin.

Under the general anesthesia the nodule was totally excised and submitted for histological examination. Histology of the lesion showed a dense dermal infiltrate consisting of histiocytes and some lymphocytes with Touton giant cells. Therefore, the diagnosis of JXG was made. The postoperative course was unremarkable. There was no evidence of local recurrence or new skin or mucosal lesions.

DISCUSSION

Eyelid tumors in children are uncommon and rarely malignant. In a survey of 398 excised eyelid tumors from children over a period of 51 years by

Doxanas *et al*. [9], the most common tumors were chalazion (20%) followed by dermoid cyst (16%), papilloma (14%), pyogenic granuloma (9%), melanocytic nevus (9%), hemangioma (7%), neurofibroma (2.5%), and molluscum contagiosum (2.5%).

Samara *et al*. [2] evaluated 32 tumors in 31 eyes of 30 patients with ocular JXG. According to their report, cutaneous JXG was concurrently present in 3 patients (3/30, 10%), and spinal JXG was present in 1 patient (1/30, 3%). The ocular tissue affected by JXG included the iris (21/31, 68%), conjunctiva (6/31, 19%), eyelid (2/31, 6%), choroid (2/31, 6%), and orbit (1/31, 3%). The iris is the most common site of ocular involvement, and it has been recognized as an important cause of spontaneous hyphema and secondary glaucoma in children.

CONCLUSION

We describe a case of solitary subcutaneous JXG involving the upper eyelid, without any other cutaneous or systemic lesions. The diagnosis of JXG is based on characteristic clinical features and confirmed by histopathology.

Disclosure

The author declares no conflict of interest.

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