Case Report

Regressing Conjunctival Nevus in a Child

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Abstract

Purpose: To report a case exhibiting drastic regression of a conjunctival nevus in a child.
Case Report: Spontaneous regression of conjunctival nevus is uncommon. We report the case of a nine-year-old Caucasian boy presenting a conjunctival-pigmented lesion situated at the plica semilunaris that underwent a significant reduction in size and color over a period of 15 months.
Conclusion: Conjunctival nevus in children is common but regression is rare, especially at the plica. This information could form an important part of the consent process when choosing between observation and surgical excision in the management of a small conjunctival lesion with no suspicious clinical features; since the latter invasive treatment involves risks such as infection, scarring and the possible risk of general anesthesia in children.

Keywords: Conjunctiva; Nevus; Regression

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INTRODUCTION

Conjunctival nevi are the most common melanocytic lesions on the ocular surface. It is also one of the top diagnosis of conjunctival tumors in children, followed by benign reactive lymphoid hyperplasia.[1] Conjunctival nevi can be either congenital or acquired. Most acquired lesions appear in childhood or during adolescence; they are typically located in the interpalpebral bulbar conjunctiva, caruncle, or pilca semilunaris.[2] Other locations such as fornix, palpebral conjunctiva, or within the cornea are rare and one should always consider other differential diagnosis such as conjunctival melanocytic intraepithelial neoplasia (C-MIN) or invasive conjunctival melanoma.[3] Diagnosis of conjunctival nevus is usually based on clinical features; if in doubt, biopsy should be considered for histological confirmation. The overall risk of malignant transformation of conjunctival nevus is less than 1%.[4] Management of conjunctival nevi should include consecutive observations using photographic documentation to detect any changes in the lesion size, shape, or intrinsic pigmentation. If any specific change is detected in the lesion, excisional biopsy alone or combined with adjuvant topical chemotherapy with or without radiotherapy (depending on the grade of dysplasia) is recommended. Spontaneous regression of conjunctival nevus in children is uncommon and has only been reported in one case before.[5] Herein, we report a case showing a drastic regression of a conjunctival nevus in a child.

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CASE REPORT

A young Caucasian boy was referred with a pigmented conjunctival lesion in his left eye, for a second opinion, by

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his primary ophthalmologist. The lesion was first noted by the parents when patient was nine years old. After two months of observation, the lesion remained unchanged in size or color, until his parents were concerned about a complaint of itching in the eye by the patient. The patient was then referred to our clinic for consideration of surgical removal of the lesion. There had been no history of trauma or previous surgery. The patient's medical and ophthalmic histories were also unremarkable. On examination, his visual acuity was 20/20 in both eyes. Biomicroscopic examination showed a flat, pigmented, conjunctival lesion at the plica semilunaris, with a variation of brown and intralesional cystic changes, measuring approximately 2.4 x 2.6 mm in the largest basal diameters [Figure 1]. No bleeding or discharge from the lesion or any increase in vascularization was noted. Our initial differential diagnosis included conjunctival nevus, C-MIN, or malignant melanoma. The management options of continued observation versus excisional biopsy were discussed with both the patient and parents. It was decided that the patient would be monitored. Over the following 12 months, the lesion became smaller [Figure 2] and by the 15th month, it had almost completely regressed with significant reduction in size and pigmentation [Figure 3]. Due to some residual pigmentation at the plica, we continued monitoring the patient on a yearly basis.

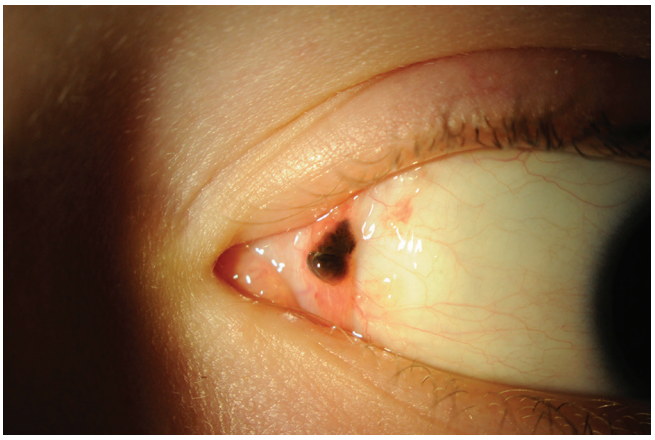

Figure 1. A flat, pigmented, conjunctival lesion at the plica semilunaris in the left eye of a nine-year-old Caucasian boy, with a variation of brown and intralesional cystic changes.

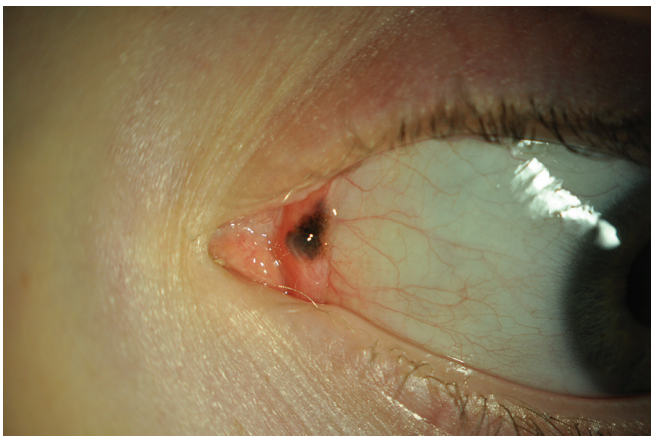

Figure 2. Same conjunctival lesion by the 12th month.

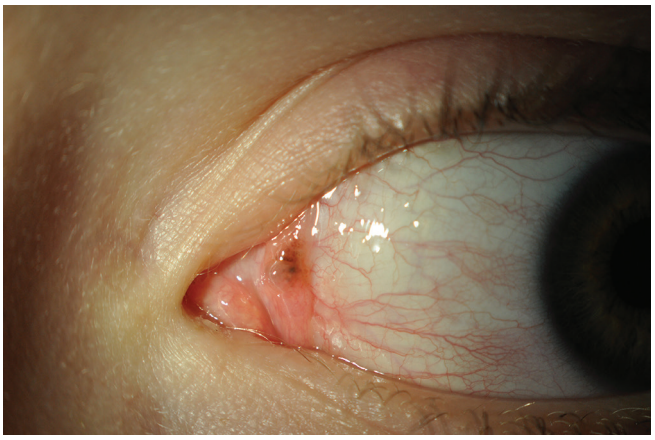

Figure 3. Same conjunctival lesion by the 15th month, showing almost complete regression.

DISCUSSION

Conjunctival nevus is a benign tumor, which can have a change in color and/or size over time.[2] Albeit rare, spontaneous regression has been previously described in a six-year-old with a small bulbar conjunctival nevus in the interpalpebral region, over a period of seven years.[5] In our case, the pigmented lesion almost disappeared over a 15-month period. Shields et al also described two patients with benign conjunctival nevi, showing a reduction in size over an average follow-up of 11 years in their cohort of patients.[2] It has been documented that benign conjunctival nevus is a cluster of melanocytic cells which form nests at the junctional zone of the epithelium. It appears as a junctional nevus which can then transform into a compound nevus. These lesions may undergo complete involution or remain as regressed lesions.[6] In our patient, the pathology of the conjunctival lesion remains unknown due to the lack of histopathological confirmation. The disappearance of the lesion observed in our patient could simply be one of the natural courses of a benign conjunctival lesion, albeit a rare one, as majority of these lesions remains stable in size.[2] This case report illustrates and affirms the potential regression ability of a conjunctival nevus, even if it is situated in an unusual location such as the plica semilunaris. This information could form a part of the consent process when choosing between observation and surgical excision in the management of a small conjunctival lesion with no suspicious clinical features; as the latter involves risks such as infection, scarring and the possible risk of general anesthesia in children.

Declaration of patient consent

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

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Nil.

Conflicts of Interest

There are no conflicts of interest.

REFERENCES

1. Shields CL, Sioufi K, Alset AE, Boal NS, Casey MG, Knapp AN, et al. Clinical features differentiating benign from malignant conjunctival tumors in children. *JAMA Ophthalmol* 2017;135:215-224.
2. Shields CL, Fasiuddin AF, Mashayekhi A, Shields JA. Conjunctival nevi: Clinical features and natural course in 410 consecutive patients. *Arch Ophthalmol* 2004;122:167-175.
3. Damato B, Coupland SE. Conjunctival melanoma and melanosis: A reappraisal of terminology, classification and staging. *Clin Exp Ophthalmol* 2008;36:786-795.
4. Shields CL, Shields JA. Conjunctival tumors in children. *Curr Opin Ophthalmol* 2007;18:351-360.
5. Haldar S, Leyland M. Spontaneous regression of a conjunctival naevus. *BMJ Case Rep* 2016;2016. pii: bcr2016216066.
6. Seregard S, Blasi MA, Balestrazzi E. Conjunctiva. In: Heegaard S, Grossniklaus H, editors. Eye Pathology: An Illustrated Guide. Springer; Verlag Berlin Heidelberg 2015 edition; 2014. p. 67-68.