Calcinosis Cutis of the Eyelid

Thanuja G. Pradeep1*, Praveen Kumar2 and B. Lakshmi1

1Department of Ophthalmology, M.S. Ramaiah Medical College and Hospital, Bangalore, India.
2Department of Dermatology, M. S. Ramaiah Medical College and Hospital, India.

Authors’ contributions

This work was carried out in collaboration between all authors. Author TGP designed the study, wrote the protocol, and wrote the first draft of the manuscript. Author PK managed the literature searches, and author BL carried out microbiological studies. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/OR/2015/14907

Editor(s):
1 Ahmad M Mansour, Department of Ophthalmology, American University of Beirut, Lebanon.

Reviewer(s):
1 Italo Giuffrè, Department of Ophthalmology – Catholic University of Roma, Italy.
2 Rahmi DUMAN, Dr. Seviket Yılmaz Education and Training Hospital, Turkey.
3 S. Krishnakumar, L&T Ocular Pathology, Sankara Nethralaya, India.

Complete Peer review History: http://www.sciencedomain.org/review-history.php?id=889&d=23&aid=7362

Case Study

Received 28th October 2014
Accepted 26th November 2014
Published 16th December 2014

ABSTRACT

We report a case of calcinosis cutis presenting in the upper eyelid. These cases can mimic various conditions of the eyelid and diagnosis is usually done histopathologically. Though they are common occurrence for dermatologists, there are very few cases reported in the ophthalmic literature. They need to be recognised and differentiated from a more dangerous metastatic and dystrophic varieties as simple excision is adequate in the idiopathic type of calcinosis cutis.

Keywords: Lid tumor; calcinosis cutis; lid mass.

1. CASE REPORT

A 18 year old male patient presented with a painless swelling over the left upper eyelid since one year. The swelling was initially small in size and gradually increased in proportion to reach the present size (Fig. 1). There was no history of pain, discharge or trauma. Patient had noticed a discoloration on the right upper lid since 2 months. On examination he had a 10mm X 8 mm raised swelling on the lateral part of left eyelid. The surface was irregular with scabs. On removal of the scab the underlying area showed ulceration. The mass was freely mobile over the orbicularis muscle. On eversion of the eyelid the tarsal plate and the conjunctiva were seen to be

*Corresponding author: E-mail: thanugopal@yahoo.co.in;
spared from the mass. The rest of the eye examination was normal with a visual acuity of 6/6 and anterior and posterior segments were normal. Differential diagnosis included keratoacanthoma and *Molluscum contagiosum*. The right upper eyelid showed a flat yellowish lesion 4mm X 4 mm in size on the medial aspect of the upper lid, the surface was smooth and the rest of the ocular examination was normal. The diagnosis of xanthogranuloma was made.

A punch biopsy of the left eyelid mass was done by the dermatologist and the histopathological examination (HPE) revealed - epithelium with acanthosis and hyperkeratosis and extension of calcific material to the epidermis, the dermis showed amorphous calcium deposits with areas of necrosis. A diagnosis of calcinosis cutis was made.

His serum calcium and phosphorous levels were normal, HIV, HBS Ag negative.

The patient underwent an elliptical incision (Fig. 2) of the left upper lid mass and a complete excision biopsy (Fig. 3) also showed calcinosis cutis with transepidermal infiltration and showed no remnants of any ocular adnexal tumor.

**Fig. 1.** Picture shows the raised lesion in the left eyelid and on eversion the tarsal plate is free of the lesion

**Fig. 2.** Intra operative pictures showing excision in toto with underlying surface smooth and the elliptical mass measuring 10 mm by 8 mm in size
The pathogenesis of calcinosis cutis is not known and hence diagnosis of the condition mandates exclusion of metastatic and dystrophic variants.

The diagnosis of calcinosis cutis is done primarily by histopathology and clinically it mimics various conditions such as molluscum contagiosum [7], keratoacanthoma, pilomatrixoma, juvenile xanthogranuloma. The clinical picture is described as small, firm verrucous nodule but requires a high index of suspicion in diagnosing the condition.

Histopathologically [8], on hemotoxylin- eosin stained preparations it shows acanthotic, papillomatous epidermis, the subepidermal region is characterized by intensely basophilic calcific deposits which is the hallmark of this condition. The deposits stain with von Kossa stain for calcium. Foreign body giant cell reaction and transepidermal elimination of calcium granules can be observed.

The treatment involves complete excision and this has been shown to have good results with no recurrences reported. Intralesional steroids have also been tried but with questionable effectiveness.

3. CONCLUSION

The diagnosis of calcinosis cutis has to be considered in any nodule involving the ocular adnexal skin and the ophthalmologist must be aware of the condition and must elicit history and also request appropriate laboratory tests to rule out the more threatening metastatic and dystrophic variants as the idiopathic variety is benign and a simple excision would suffice in these cases.

CONSENT

All authors declare that ‘written informed consent was obtained from the patient (or other approved parties) for publication of this case report and accompanying images.

ETHICAL APPROVAL

Not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.
REFERENCES


© 2015 Pradeep et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sciencedomain.org/review-history.php?id=889&id=23&aid=7362