



A CASE STUDY OF UNUSAL LARGE CHRONIC EPIDERMAL CYST IN UPPER EYELID

Ophthalmology

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ABSTRACT

Purpose: To report case study of unusual chronic large epidermal cyst in upper eyelid.

Method: A 16/M presented with an chronic, painless, large swelling from in upperlid of right eye from childhood without any history of ocular surgery, trauma. BCVA in OD: 6/6; OS: 6/6. Ocular examination .A 3.5x2.5 cm horizontally oval shaped epidermal swelling free from deeper tissue was noted in upperlid of right eye. Slit lamp and fundus examinations of both eyes were unremarkable. IOP: OU - 16 mmhg. A Ctscan orbit with contrast showed the result as dermoid and fine needle aspiration biopsy showed the results as possibility of keratinous cyst (epidermal cyst). The mass was excised. The histopathological examination confirmed the diagnosis of keratinous cyst. Patient was treated postoperatively by oral and topical antibiotics. We kept follow up of our patient on 7th day and then every month for 3 months.

Result: A 3.5x2.5cm swelling in upperlid of right eye since childhood with no history of trauma or surgery was excised and followed up 3 months without any recurrence or lid retraction.

Conclusion: A surgical excisional biopsy is a very useful treatment for large epidermal cyst of eyelid as it serves the purpose to treat it and to send the excised mass for histopathological examination is a very good practice to confirm the diagnosis.

KEYWORDS

epidermal cyst, excision biopsy, FNAC, ct scan

INTRODUCTION:

Epidermal cyst is a solitary subepithelial cyst, slowly progressive and firm in consistency. It is most commonly seen on face, scalp, neck and trunk. In ocular conditions it is commonly seen on upper eyelid, mainly on the conjunctiva or on skin. It typically present during adolescence or late adulthood. Usually it is asymptomatic however it may become inflamed or infected.

Case Report:

A 16 year old male presented to Ophthalmology Department, G.M.E.R.S. Medical College And General Hospital, Gotri, Vadodara in September 2019 with a complaint of something growing in upperlid of right eye since childhood. It was chronic painless swelling. There was no past history of any ocular surgery or trauma, no systemic illness.

On ocular examination; BCVA in OD: 6/6; OS: 6/6. On local examination; we find a 3.5x2.5 cm horizontally oval shaped epidermal swelling free from deeper tissue in upperlid of right eye. (figure 1) Slit lamp and fundus examinations of both eyes were unremarkable. IOP: OU - 16 mmhg.

A Ctscan orbit with contrast showed the result as dermoid and fine needle aspiration biopsy showed the results as possibility of keratinous cyst (epidermal cyst).



Figure 1: Preoperative presentation of the eyelid mass

The mass was excised. (figure 2)



Figure 2: Excised mass

The histopathological examination confirmed the diagnosis of keratinous cyst.

Patient was treated postoperatively by oral and topical antibiotics. We kept follow up of our patient on 7th day and then every month for 3 months.

DISCUSSION:

There are different benign and malignant lesions can be presented in the eyelids. Usually benign lesions are 3 times more common than malignant neoplasms. Epidermal cyst is solitary subepithelial cyst, slowly progressive and firm in consistency, and it is most commonly seen on the face, scalp, neck and trunk. Epidermoid cysts frequently seen on the upper eyelid, mainly on the conjunctiva or on the skin. Epidermoid cyst is the most common type of benign periorcular cutaneous lesions, accounting for 18% of the excised benign lesions.

Various mechanisms have been proposed for epidermoid cyst formation. It can be due to implantation of epidermal elements that may be because of trauma or surgery, occlusion of the pilosebaceous follicles or surface epidermis, or However, in recent studies, human papilloma virus has been associated but it is more commonly associated with epidermoid cysts of plantar surface.

Histology shows cyst lined by squamous epithelium and cheesy material (keratin) produced by inner layer of squamous epithelium. Complications that are associated with epidermoid cysts include malignant transformation, infection and rupture that cause granuloma formation or even sometime abscess formation. Differential diagnosis are dermoid cysts, sebaceous cyst and lipoma.

Sebaceous cyst is a common benign cyst that appears as smooth, elevated, yellow, usually painless swellings beneath the skin in areas with multiple hair follicles. It may not change much or may grow gradually with time. There is blockage of pilosebaceous duct on the skin in cases of sebaceous cysts. Whereas cysts arose from infundibulum of hair follicles, are either epidermoid or dermoid cysts. Epidermoid cysts contain stratified squamous epithelium that forms the cyst wall, whereas dermoid cyst contains epidermal appendages like sebaceous gland, sweat gland and hair follicles. Small asymptomatic epidermoid cyst can be managed with intralesional triamcinolone injection. Incision and drainage may be performed if a cyst wall is inflamed. Injection of triamcinolone into tissue surrounding the inflamed cyst results faster improvement of

symptoms. However, it does not eradicate the cyst. Lucarelli et al. reported cases of intrastromal epidermal inclusion cysts, which were initially diagnosed as chalazions and for which incision and curettage was done.⁵ Large symptomatic cyst should be excised in toto like done in our case.

CONCLUSION:

A surgical excisional biopsy is a very useful treatment for large epidermal cyst of eyelid as it serves the purpose to treat it and to send the excised mass for histopathological examination is a very good practice to confirm the diagnosis. Preoperative cystoscopy also helps to see the extension of mass. Thus we also concluded that detailed preoperative investigation should be done in such cases.

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