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Case Report

MULTIPLE BILATERAL PERIORBITAL ECCRINE HIDROCYSTOMAS

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ABSTRACT

Eccrine hidrocystoma is a benign cystic tumor of the eccrine sweat gland duct. It occurs mainly on the face and more common in elderly women with male:female ratio of 1:8. It is characterized by a chronic course and seasonal variability with aggravation in summer season. It presents as an asymptomatic, flesh colored translucent facial papules. Here we present a case of a 50 year old male with multiple eccrine hidrocystomas on both the eyelids.

Key words: Eccrine hidrocystoma; Eyelid; Benign cystic tumor.

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INTRODUCTION

Eccrine hidrocystoma (EH) is a benign cyst of the mature deformed eccrine sweat gland duct. It is also known as cystadenoma or sudoriferous cyst [1-3]. Robinson in 1893 was the first to describe eccrine hidrocystoma presenting with multiple lesions, named as Classic Robinson type believed to be derived from the duct. The other more common type is the one with the solitary or few lesions, named as 'Smith and Chernosky' type of hidrocystoma believed to be derived from the secretory coil [5-6].

They are most commonly seen in adult females with predominantly involving face and eyelids showing a centro-facial distribution. The lesions are characterized by translucent, skin or blue colored, dome shaped papules about 2 to 5mm in size with cystic consistency.

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CASE REPORT

A 50 year old male patient presented with a history of multiple swellings over both the eyelids since 3 years. The lesions were initially small, of a pin head size and then gradually increased to the present size. There was no history of dimension of vision, bleeding or any discharge from the swellings. There was no history of similar complaints elsewhere on the body. No history of similar complaints in the past or in other family members.

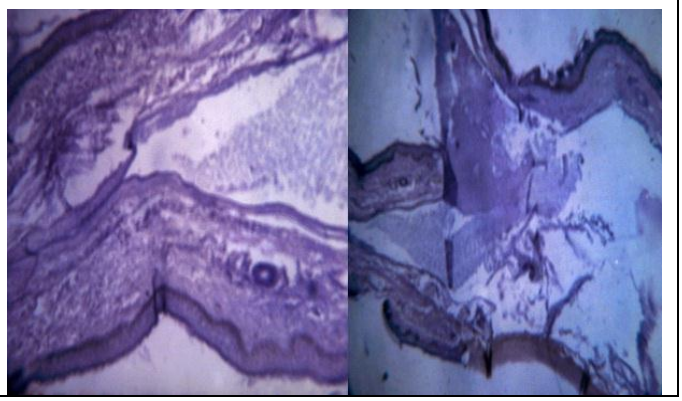
On examination of the right eyelid three cystic swellings were observed, with the largest one measuring 0.7×1cm in size present over the lateral canthus of the right lower eyelid and the other two small swellings present on the lateral aspect of upper eyelid. Left eyelid had a single lobulated cystic swelling measuring 1.2×1cm in size present near the medial canthus of the lower eyelid of left eye. All the swellings were trans illuminant in nature (Figure.1)

The lesions were biopsied and on histopathological examination the biopsy specimen showed a dermal cystic lesion that was unilocular and lined by two

layers of cells. The inner layer of cells was cuboidal and outer layer constituted of elongated myoepithelial cells. The overlying epidermis was normal.(Figure.2) The diagnosis was confirmed as eccrine hidrocystoma and lesions were surgically excised.

Fig 1. Right eyelid with three cystic swellings, present over the lateral canthus of the right lower eyelid and on the lateral aspect of upper eyelid. Left eyelid had a single lobulated cystic swelling present near the medial canthus of the left lower eyelid.

Fig 2. Dermal cystic unilocular cavity, lined by two layers of cells. The inner layer of cells was cuboidal and outer layer constituted of elongated myoepithelial cells. The overlying epidermis was normal.



DISCUSSION

Eccrine hidrocystoma is a benign, rare, cystic lesion of sweat gland duct. It predominantly occurs on the face with a centro-facial distribution. They are more prevalent in adults between the age group of 30-70 years of age. They show a chronic course of progression with aggravation in hot and humid environment [2]. Our case was of the Classical Robinson type of eccrine hidrocystoma. The exact cause of multiple eccrine hidrocystoma is not known. Various hypotheses say the cause to be retention of sweat due to closure of intradermal portion of the eccrine duct leading to secondary dilatation of the sweat duct or adenomatous proliferation of the excretory duct [5].

EH is clinically characterized by small translucent cystic papules to nodules with a bluish hue. It is either solitary or multiple usually on the medial and lateral aspect of eyelids, periorbital and malar regions of face. The lesions on the eyelids can be classified as marginal, palpebral and orbital. They range from 2 to 5mm in size [2]. The differential diagnosis of eccrine hidrocystoma includes cystic lesions of eyelid such as follicular derived cysts, sebaceous cyst, epidermal inclusion cyst, milia, hemangioma, lymphangioma, apocrine hidrocystoma, eccrine acrospiroma, pigmented cystic type of basal cell carcinoma, malignant melanoma [2]. EH can be differentiated from apocrine hidrocystoma (AH) (cyst of moll) by its location and distribution. The opening of the apocrine sweat glands is more closely associated with eyelashes and involves the eyelid margin. In addition, the AH are larger with no change with alterations in weather and have a bluish color with yellow apical deposits. In contrast to AH, EH does not involve the eyelid marginas they are distributed throughout the eyelid skin and not confined to the eyelid margin [8].

Multiple hidrocystomas of the eyelid may be associated with Schopf-Schulz-Passarge syndrome, Graves' disease, Parkinson disease, Goltz-Gorlin syndrome [2]. On histopathological examination they are seen as unilocular or multilocular well demarcated cyst in the superficial and mid-dermis. The wall of the cyst is lined by two layers, the inner layer of columnar cells and the outer layer consists of elongated myoepithelial cells. It differs from AH by the absence of decapitation secretions, presence of papillary projections into the lumen, PAS-positive, Diastase sensitive granules and myoepithelial cells. Also the solitary type of EH stains positive for S-100 protein [6, 7].

The primary management of EH include avoidance of hot temperatures and humid conditions. The various modalities of treatment used are topical 1% atropine, topical scopolamine, Botulinum toxin type-A. It can also be surgically excised or electrodesicated or cauterized. Laser systems like non-ablative 585 nm wavelength pulsed dye laser, ablative Carbon dioxide laser or erbium: YAG laser can be used [1].

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None

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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