

# Trichilemmal cyst in the eyelid: a rare presentation

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Received: 2009-05-13 Accepted: 2009-07-28

## Abstract

• A 42-year-old Malay lady presented with a 2-year history of painless and progressive right upper lid swelling. There was no history of trauma or similar lesion elsewhere. An excisional biopsy of the mass was performed and the histopathological findings of the excised lesion were consistent with those for a trichilemmal cyst. Trichilemmal cyst, although rare should be considered in any case of eye lid lesion.

• **KEYWORDS:** trichilemmal cyst; eye lid; pilar cyst

DOI: 10.3969/j.issn.1672-5123.2009.08.006

Karuppannan B, Shaharuddin B, Zunaina E, Naik VR. Trichilemmal cyst in the eyelid: a rare presentation. *Int J Ophthalmol (Guoji Yanke Zazhi)* 2009;9(8):1451-1452

## INTRODUCTION

Trichilemmal cysts are also known as pilar cysts. They are common benign tumors occurring mainly on the scalp. It presents as smooth, mobile, firm and round nodule without a visible punctum, containing keratin and its breakdown products<sup>[1,2]</sup>. Trichilemmal cyst arises from the outer root sheath (trichilemma) of the hair follicle<sup>[3]</sup>. There is often an autosomal dominant inheritance pattern as the lesion is frequently familial<sup>[1,2]</sup>.

To the best of our knowledge, no cases of trichilemmal cysts involving the eyelid have been reported. We report a rare case of trichilemmal cyst located in the upper eyelid.

## CASE REPORT

A 42-year-old Malay lady presented with history of progressive painless swelling over the right upper eyelid over a period of two years. It was not associated with redness, discharge or blurring of vision. There was no history of trauma or similar lesion elsewhere. There was no family history of similar lesion. On clinical examination of the right eye, there was a cystic, freely mobile, non tender swelling over the right upper

eye lid measuring about 15mm × 10mm × 10mm (Figure 1). There was no ulceration noted over the skin. Examination of the rest of the anterior and posterior segments was unremarkable. Left eye was essentially normal. Systemic examination revealed normal findings.

An excision biopsy of the mass was performed under local anaesthesia. Unfortunately the swelling ruptured during separation releasing cheesy yellowish fluid. The cyst was removed and sent for histopathological examination. Grossly, the mass measured 10mm × 10mm × 5mm and was grayish brown in colour. There was presence of cystic spaces. Histopathological findings revealed fragments of fibrocollagenous tissue containing a cyst. The cyst was lined by stratified squamous epithelium with abrupt keratinization (Figure 2). Uneven interphase between keratinized and nonkeratinized cells also noted (Figure 3). There was no granular cell layer or glandular tissue noted. The cyst contained keratin material.

A diagnosis of trichilemmal cyst was made based on the histopathological findings. Patient was reviewed two weeks later. The wound healed well and the eyelid was normal (Figure 4). There was no recurrence of the swelling noted after one and a half years of observation.

## DISCUSSION

There are many types of benign and malignant tumours that can occur in the eyelids. Chalazia, epidermal inclusion cysts, seborrhic keratoses and apocrine hydrocystomas are the most common benign lesions<sup>[4]</sup>.

Trichilemmal cysts occur most commonly on the scalp due to abundance of hair follicle. They can also occur on other parts of the body except the palms, soles, genitalia, axillae and groins<sup>[5]</sup>. Trichilemmal cysts involving the skull bases, pulp of index finger and upper lip have also been reported<sup>[2,3,6]</sup>. Trichilemmal cysts were previously considered sebaceous or epidermoid cysts and were historically referred to by the common name of wen<sup>[2]</sup>. Trichilemmal cyst needs to be differentiated from epidermoid cyst. Trichilemmal and epidermal cysts are both keratinous cysts. Clinically trichilemmal cysts and epidermal cysts have similar presentation. However they differ histopathologically in which trichilemmal cysts do not have granular cell layer<sup>[6]</sup>. Approximately 20% of epithelial cysts are trichilemmal cysts and the other 80% are epidermoid<sup>[7]</sup>. There are reported cases of proliferating trichilemmal cyst and malignant proliferating trichilemmal tumour of the eyelid<sup>[8,9]</sup>.

To our knowledge, no cases of trichilemmal cysts involving the eye lid have been described. The uniqueness of this case is due to its rare site of presentation. It is not possible to confirm

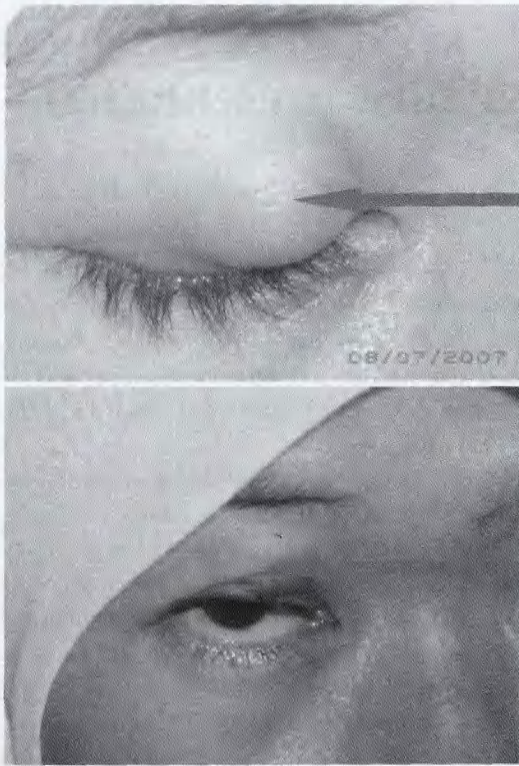


Figure 1 Trichilemmal cyst of the right upper eye lid (arrow)

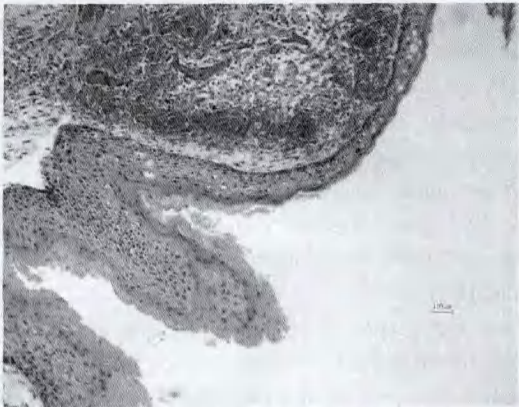


Figure 2 Cyst was lined by squamous epithelium. Abrupt keratinisation is seen. (HE ×10)

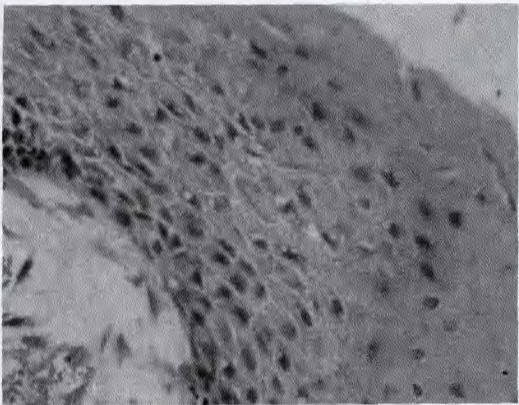


Figure 3 Uneven interphase between keratinized and nonkeratinized cells (HE ×40)



Figure 4 Two weeks post excision of right trichilemmal cyst

the diagnosis of eyelid lesions based on the clinical findings alone. Thus all excised eyelid lesions should be submitted for histopathological examination<sup>[10]</sup>. This case highlights the need for the ophthalmologists to bear in mind the rare lesions in the eyelid.

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#### 罕见的眼睑毛发囊肿 1 例

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#### 摘要

患者,女,42岁,马来人,无痛性进展性右上睑肿胀 2a 就诊,无外伤史,身体其他处无同样病损。进行肿块切除活组织检查,组织病理学检查结果显示与毛发囊肿表现相符。毛发囊肿,尽管罕见,在眼睑病变中需要考虑到。

关键词: 毛发囊肿; 眼睑; 藏毛囊肿