

# A Case Report of Epidermal Cyst of the Eyelid

Dr. G. Ravi Babu<sup>1</sup>, Dr. V. M. V. R.V. Prasada Rao<sup>2</sup>

<sup>1</sup>Associate Professor of Ophthalmology, Guntur Medical College, Guntur, AP, India

<sup>2</sup>Associate Professor of Ophthalmology, Siddhartha Medical College, Vijayawada, AP, India

**Abstract:** Epidermal cyst of the eyelid in itself is of rare occurrence. It is frequently seen on the upper eyelid either on the conjunctiva or skin surface. More common in men, either in 2<sup>nd</sup> and 3<sup>rd</sup> decade. It is usually asymptomatic and mostly presents as a slowly growing painless mass. It is most commonly confused with sebaceous cysts and dermoid cyst but histopathological examination provides the final diagnosis. Histopathology of the mass reveals a cyst lined by squamous epithelium filled with keratin.

**Keywords:** Epidermal cysts, Squamous epithelium, Keratin, Sebaceous cyst

**Key Message:** Epidermal cysts are solitary, firm subepithelial lesions mostly seen on scalp, face, neck and trunk. Eyelid masses are frequently seen on the upper eyelid. Usually asymptomatic but may cause cosmetic disfigurement. Surgical excision is the treatment of choice and cures it completely.

## 1. Introduction

We present a case of 27 year old male patient with swelling of the Right upper eyelid since 6 months, which was gradually progressing in size with cosmetic disfigurement.

## 2. Case Report

A 27 year old male patient, daily laborer by profession came with history of painless slowly growing mass over the Lateral aspect of the Right upper eyelid since 6 months. No prior history of trauma, surgery or inflammation. General Examination shows no evidence of skin lesions and masses elsewhere. On examination of the mass, a 2x2 cm mass lesion Present on the lateral aspect of the right upper eyelid. Surface of the mass is smooth with blood vessels visible over the mass. Skin over the mass is not pinchable, variable in consistency, mobile and surrounding skin is normal. No tenderness was noted. Ocular examination was normal with visual acuity 20/20 OU and ocular movements full. Fundus examination of both eyes was normal. B-scan of the right eye revealed a hypodense lesion measuring 1.9x1.9 cms noted in the subcutaneous tissue of the right upper lid with HU of 10-30. CT Brain was normal and no extension of the mass into the orbit or cranium seen. Excision of the mass with lid reconstruction was done under local anaesthesia. A direct incision over the mass is given. Intraoperatively a rounded mass of 2x2 cm size, encapsulated, variable in consistency, attached to the underlying muscle and tarsus posteriorly with no bone involvement was noted. Excess loose skin was excised and the wound sutured with 6-0 silk subcuticular stitch. Gross examination revealed a single grey brown cystic mass of size 2 cm in diameter. Cut section revealed cyst filled with pultaceous material. Microscopic appearance show cyst lined by squamous epithelium filled with keratin consistent with epidermal cyst of Right upper eyelid.

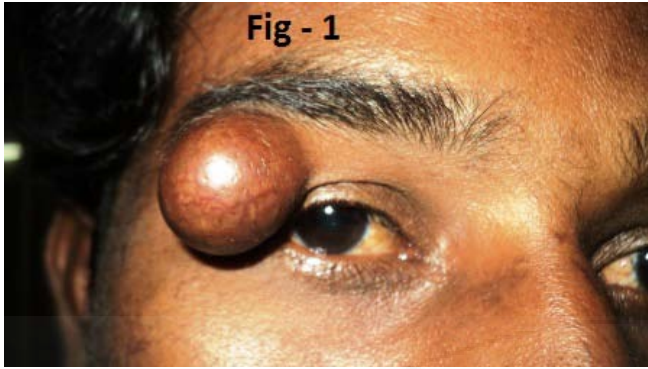
## 3. Discussion

Epidermal cysts are slowly progressive, firm, solitary subepithelial lesions commonly seen on face, scalp, neck and

trunk. They are frequently found on the upper eyelid, where they can occur on the conjunctival or skin surface.<sup>[1]</sup> Epidermal cysts are twice as common in men as in women, occur at any age but most common during adolescence and late adulthood, vary in size from 1-5 cms. They are usually asymptomatic however they may become inflamed or secondarily infected causing swelling and tenderness.<sup>[2]</sup> They are thought to originate from occluded pilosebaceous follicles or surface epidermis. Histology shows cyst lined by squamous epithelium and cheesy material (keratin) produced by the inner layer of squamous epithelium. They are associated with Torre's syndrome or Gardner's syndrome.

Torre's syndrome include multiple sebaceous gland tumours, other cutaneous tumours and visceral carcinoma especially of the colon. Gardner's syndrome associated with intestinal polyposis, multiple osteomas of facial bones, fibromas and epidermal inclusion cyst of the skin, fibromatosis of the abdominal wall and breast. Differential diagnosis include steatocystoma multiplex, sebaceous cyst, lipoma, dermoid cysts and neurofibromas.

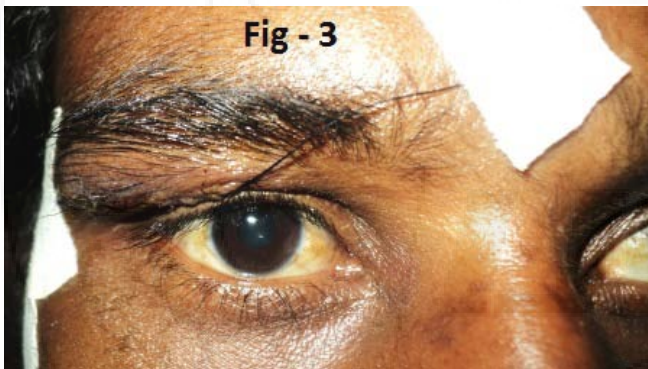
Complications include infection, malignant transformation, and rupture causing a granulomatous reaction or even abscess formation. Treatment of choice is surgical excision. Various surgical methods include direct incision over the mass, brow incision and periorbital incisions such as Lynch's superomedial incision, transmarginal eyelid splitting incision, lateral canthotomy or incision through the upper eyelid crease. Direct incision over the mass provides surgical access, good exposure and familiar anatomical landmarks in the lid.



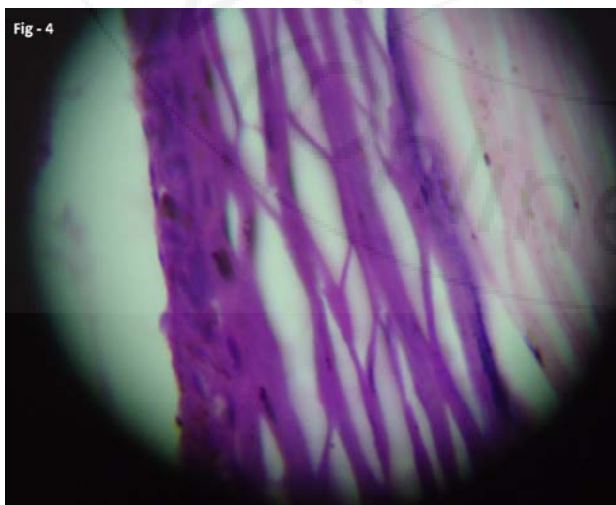
**Figure 1:** Preoperative photo showing the mass over the lateral aspect of the upper eyelid



**Figure 2:** Intraoperative photo showing incision over the mass and careful separation of the mass



**Figure 3:** Postoperative photo after surgical excision and subcuticular suture



**Figure 4:** Histopathology of the mass in high magnification showing squamous epithelium and keratin.

## References

- [1] Principles And Practice of Ophthalmology, Albert and Jakobiec's, Elsevier 3<sup>rd</sup> edition volume 3 pg 3245.
- [2] Emedicine/medscape.com article 1061582.