



Spectrum of Eyelid Tumors at a Tertiary Eye Care Centre in Kerala

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Abstract

Purpose

- 1) To study demographic pattern & distribution of various eyelid tumors.
- 2) To study clinical profile of eyelid tumors
- 3) To evaluate clinic-pathological correlation of eyelid tumors.

Methods: 35 Patients presenting to our eye care centre with clinical features suggestive of an eyelid tumor between Jan 2012 & May 2013 were included in the study. Data collected includes age, sex, geographical location, predisposing factors of study population. Provisional diagnosis was made based on clinical features & morphological characteristics of lid swelling, extent of involvement, orbital invasion & associated systemic features. Histo-pathological diagnosis was made from the biopsy specimens obtained. The extent of correlation between the clinical diagnosis & the histopathological diagnosis was analyzed.

Results: 35 patients were included for analysis. Majority of the patients (31%) were in the age group of 41 to 60 years. 63% patients were females (n=22). 60% of them were from urban areas (n=21). All the patients presented with complaints of swelling over the eyelid, 11% had mechanical ptosis. 57% of the lesions were located on the upper eyelid.

Histopathologically 17% (n=6) of the tumors were malignant, the rest being benign. Most common tumors were Intradermal naevus 20%, Dermoid cyst 20% & Capillary Hemangioma 20%.

Clinical diagnosis was correlating with pathological diagnosis in 91% of cases (n=31).

Conclusions: This study gives us some insight into the spectrum of eyelid tumors presenting to this tertiary referral centre. A reliable clinical diagnosis can be made based on the morphological & associated features of the mass lesion, which in most cases correlates with the histo-pathological diagnosis.

Keywords: Eyelid, Tumors, histopathology.

Aims and Objectives

- 1) To study demographic pattern & distribution of various eyelid tumors.
- 2) To study clinical profile of eyelid tumors
- 3) To evaluate the clinic-pathological correlation of eyelid tumors.

Materials & Methods

Patients presenting to the Oculoplasty clinic of this tertiary eye care centre with clinical features suggestive of an eyelid tumor were included in the study. Approval for conducting the study was obtained from the institutional review board. An

informed consent was taken at the time of inclusion in the study. A thorough clinical history was taken from the patient with regards to presenting complaints, past & systemic history, medication history, personal history.

General & Systemic evaluation was done whenever indicated to rule out possibility of systemic associations.

Detailed ocular examination was done to assess the best corrected visual acuity, external eye examination, anterior segment examination by slit lamp, posterior segment examination by indirect ophthalmoscopy, intraocular pressure.

Additional investigations like exophthalmometry and external eye photography were done in relevant cases.

A provisional clinical diagnosis was formulated at this point of the work up.

Excisional or incisional biopsy of the tumor was done in all cases depending on the nature of the tumor.

Tissue samples obtained intra-operatively were sent for a detailed histopathological examination to the pathology laboratory at our eye care centre. A histopathological diagnosis was made based on this examination. The correlation between the clinical and histopathological diagnoses was checked thereafter.

Study Design: Descriptive

Sample Size: 35

Study Period: January 2012 to May 2013 (17 months)

Inclusion Criteria

Patients presenting to the Oculoplasty clinic of this eye care centre with features suggestive of an eyelid tumor between Jan 2012 to May 2013.

Exclusion Criteria

Patients not willing to be included in the study
 Patients not willing for surgical excision of tumor.

Results

A total of 35 patients were included for analysis. Sixty three percent of the patients (n=22) were aged less than 40 years (n=22) [Fig. 1]. Sixty three percent (n=22) of the patients studied were

female [Fig. 2].

All the patients presented with complaints of a mass lesion.

Fifty seven percent (n=20) of the patients had a mass lesion located on the upper lid; the lower lid & lateral canthus being involved less frequently [Fig. 3]. Twenty percent of (n=7) patients had lid margin involvement. Seventeen percent (n=6) had conjunctival involvement. One patient each had ocular surface complications secondary to the tumor. One patient had lacrimal gland involvement.

The most frequent provisional clinical diagnosis was Dermoid cysts (n=9) and Squamouspapillomas (n=8). [Fig. 4]

On histopathological examination, the most frequent tumors were Dermoid cysts (n=7) followed by Intradermal naevi (n=7) and Capillary hemangioma (n=7). [Fig. 4]

In the study population, 17% (n=6) were found to be malignant on histo-pathological examination.

The clinico-pathological correlation in this series was found to be 91%.

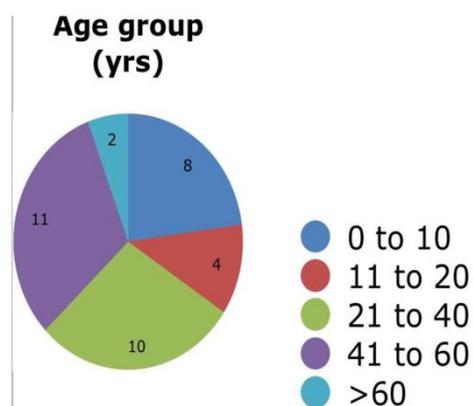


FIG. 1 : Age distribution

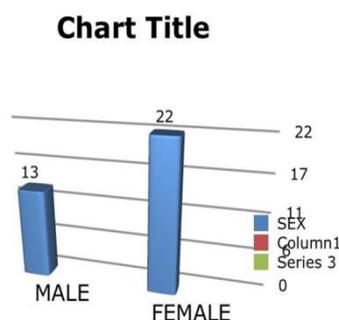


FIG. 2 : Sex distribution

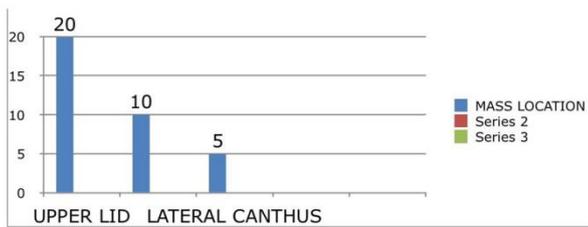


FIG. 3 : Mass location

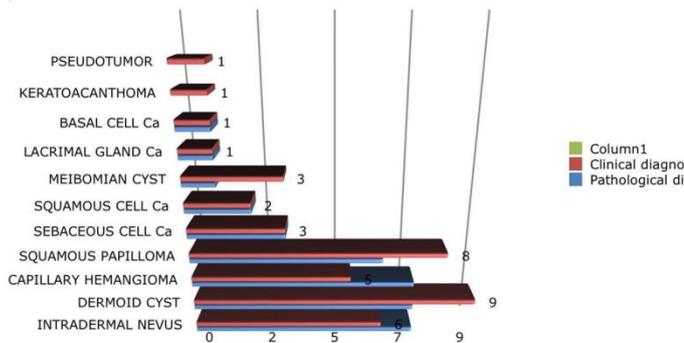


FIG. 4 : CLINICAL & PATHOLOGICAL CORRELATION

Discussion

In this study, majority of the patients were less than 40 years old (63%). Also, majority of the patients in the study were females (63%).

All the patients presented with complaints of a mass lesion involving the eyelids. Some of these patients also had complaints of ptosis. Most of the tumors were seen on the upper lid (57%). Less frequently the lower lid or lateral canthus were involved.

Lid margin involvement was seen in 7 (20%) of the cases in the study. Cases with lid margin involvement were more likely to have upper lid mass & were more likely to have ptosis as an associated complaint.

Conjunctival involvement was seen in 6 (17%) of the cases. These cases were more likely to have lid margin involvement too. Ocular surface complications secondary to the tumor was seen in 1 case. Lacrimal gland involvement was seen in 1 case.

Of all the cases studied, the common provisional clinical diagnoses were Dermoidcysts (n=9, 26%) & Papilloma (n=8, 23%). On histo-pathological examination, the most common tumors found were Dermoidcysts (20%), Intradermal nevi (20%) & Capillary hemangioma (20%). A study

in North India¹ found vascular tumors (21.3%), neural tumors (18%) & dermoid cysts (16.4%) to be the most common benign tumors of the eyelid. A study in Japan² found nevocellularnevi (11%) & Papillomas (9%) to be the most common benign eyelid tumors.

In our study, 17% (n=6) tumors turned out to be malignant on histo-pathological examination, the rest being benign. In a study in Japan², 27% of the eyelid tumors were found to be malignant. In a study in Switzerland³, 16% of the eyelid tumors were benign.

The malignant lesions were sebaceous cell carcinoma (n=3), basal cell carcinoma (n=1), squamous cell carcinoma (n=1) & lacrimal gland carcinoma (n=1). A study on eyelid malignancies in Central India⁴, found basal cell carcinoma (44.5%), sebaceous cell carcinoma (37%) & squamous cell carcinoma (17%) to be common eyelid malignancies. A study in Nepal⁵ found sebaceous gland carcinoma (40.5%) to be the most common eyelid malignancy.

There was a 91% correlation between the clinical & pathological diagnoses in our study.

Conclusion

This study gives us an insight into the spectrum of eyelid tumors presenting to our eye care centre. The most common benign eyelid tumors presenting to our centre are Dermoid cysts, Intradermal nevi and Capillary hemangiomas. The most common malignant eyelid tumor seen is Sebaceous gland carcinoma. There is a good amount of correlation between the clinical & pathological diagnoses in these cases.

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