



A CLINICAL STUDY ON THE PREVALENCE AND MANAGEMENT OF EYELID TUMOURS AT A TERTIARY CARE CENTRE IN KAKINADA

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ABSTRACT

Background: Eyelid swellings are one of the common complaints with which patients attend the ophthalmologist.

Objective: The purpose of the present study is to provide an overview of the prevalence of common eyelid tumours and to

share our experiences in managing them. **Methods:** This is a prospective interventional study done on twenty patients February 2022 to July 2022 at GGH, Kakinada. **Results:** Benign tumours were seen in 75% of the cases and malignant tumours were seen in 25%. Benign tumours like dermoid cyst and sebaceous cyst were removed in toto. In case of large sized tumours, with suspected malignancy of >75% of lid involvement, wide excision was done along with reconstructive surgery like Cutler Beard bridge flap procedure. **Conclusion:** Majority of eyelid tumours are benign lesions. A thorough clinical evaluation and early intervention can prevent cosmetic disfigurement and further complications.

KEYWORDS : Eyelids, benign tumours, malignant tumours

I. INTRODUCTION

The eyelids serve to protect the eye, reconstitute the tear film and cover the eye during sleep. The eyelids may be affected by a variety of congenital, infectious, inflammatory, benign and malignant tumours. Eyelid tumours are one of the common neoplasms encountered by ophthalmologists. Eyelid tumours show a similarity with the tumours of skin and adnexa because of numerous similar histological components. Most lesions develop from the epidermis. Approximately 5-10% of all skin cancers and 15% of all facial tumours can involve the eyelids. Benign tumours of the eyelids are three times more common than malignant tumours. The varied clinical features, prevalence and outcomes of eyelid tumours and subtypes can be attributed to geographical, genetic, socio economic factors. Exposure to sun light and Ultra violet exposure, skin pigmentation are important risk factors for eyelid tumours. The early presentation of patients with eyelid tumours can be attributed to the facial and cosmetic disfigurement.

II. MATERIALS & METHODS

A prospective study was done on twenty patients attending the Department of Ophthalmology, Government General Hospital, Kakinada, of different age groups and both sexes with eyelid tumours between February 2022 and July 2022. All the patients were evaluated clinically with proper history. Ocular examination including size, shape, location, extent, margins of the swelling and lymph node examination was done. Routine blood and radiological investigations were performed. For larger lesions CECT brain with orbits and MRI orbits were formed.

Incision or excision Biopsy was performed for all the tumours and sent for Histopathological examination. After HPE confirmation of malignant tumours, wide local excision was done. Defect in the eyelid was reconstructed with appropriate reconstruction procedures. All the patients were followed up for six months period for response to treatment and for any recurrences.

III. RESULTS

A total of twenty patients of which 12 female (60%) and 8 male (40%) patients between ages 15 to 72 years were evaluated with a mean age of 51.3years. Upper eyelid swellings in 60% (12) and lower lid swellings in 8 patients were noted.

Benign lesions were noted in 15 patients and malignant lesions in 5 patients were noted. Benign lesions were mostly noted in patients between 30-50 years age groups with 60% incidence and malignant lesions were seen in above 60 years age groups with 100% incidence. Lipodermoid cysts noted in 4 patients was the most common benign lesion in 20% of the patients and Basal cell carcinoma noted in 3 patients was the most common malignant lesion in 15% of the patients.

TUMOUR	No. of Patients	Percentage %
Papilloma	3	15%
Lipo dermoid cyst	4	20%
Pyogenic granuloma	2	10%
Sebaceous cyst	2	10%
Intradermal nevus	3	15%
Capillary Hemangioma	1	5%
Basal cell carcinoma	3	15%
Meibomian carcinoma	2	10%

Papilloma and intradermal nevus were noted in 3 patients with 15% incidence each followed by pyogenic granuloma and sebaceous cyst in 2 patients each with 10% incidence. of different age groups and both Among the malignant lesions basal cell carcinoma accounted for 60% of the malignant cases and Meibomian gland carcinoma occurred in 40% of the malignant cases. Among benign lesions all the lesions with 100% incidence presented as Nodular lesions. Among the malignant lesions 3 out of 5 patients presented with ulcerated growth with 60% incidence and 2 out of 5 patients presented with nodular growth with 40% incidence.

The treatment for most of the benign tumours was simple excision and the excised tissue was sent for histopathological examination. For cases of malignant eyelid tumours wide local excision with 4-5mm margin clearance was done and the specimen was sent for histopathological examination.



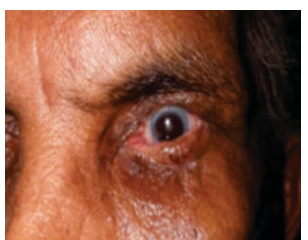
Meibomian Gland Carcinoma -upper Eyelid



Immediate Post Op



After Cutler Beard Stage 1 With Bridge Flap



After Cutler Beard Stage 2

Table :1 Incidence of eyelid tumours

IV. DISCUSSION

In our study on 20 patients with eyelid tumours maximum patients were females with a female to male ratio of 1.5:1 indicating the higher incidence in female patients. The mean age of the patients in our study was 51.3 years. Majority of the lesions were noted in the left eyelid (14) as compared to right (6) side with a ratio of 2.3:1. With regard to involvement of upper and lower eyelids, upper eyelid swellings were common as compared to lower eyelids with an incidence of 1.5:1.

In the present study the incidence of benign lesions was more as compared to malignant tumours of eyelids with a ratio of 3:1. Benign lesions were most common in patients between 30-50 years where as Malignant tumours were common between the ages 60-75. In a study by Rathod et al on 100 patients, the incidence of benign to malignant lesions was 1.5:1 which may be attributed to a smaller sample size in our study. In our study maximum number of benign and malignant eyelid tumours were noted in female patients which may be correlated to the study conducted by Gosai et al.

In the present study Lipodermoid cysts were noted in 4 patients and is the commonest benign eyelid tumour in 26.6% of the patients with benign lesions followed by Papilloma and Intra dermal Nevus in 3 patients each with an incidence of 20%. Pyogenic granuloma and sebaceous cysts were found in 2 patients each with an incidence of 13.3%. In their studies Ni et al had found that squamous papilloma is the most common benign eyelid tumour.

In the present study Basal cell carcinoma noted in 3 patients was the most common malignant lesion in 15% of the patients with an incidence of 60% among malignant eye lid tumours followed by Meibomian gland carcinoma in 2 patients amounting for 40 % of the malignant eyelid tumours. In a study by Krishnamurthy et al sebaceous gland carcinoma is the most common malignant eyelid tumour followed by Basal cell carcinoma.

Among benign lesions all the lesions presented as Nodular lesions. Among the malignant lesions 3 out of 5 patients presented with ulcerated growth with 60% incidence and 2 out of 5 patients presented with nodular growth with 40% incidence. In a study by Syed et al Nodular lesions are the common in benign and malignant eye lid tumours which was in correlation with our present study.

The treatment for most of the benign tumours was simple excision and the excised tissue was sent for histopathological examination. The cosmetic outcome was good post operatively for most of the benign tumors. For papilloma, sebaceous cyst, pyogenic granuloma, intradermal nevus simple excision was done. For lipodermoid cyst in toto excision of the tumour was done along with lid repair in layers. For capillary Hemangioma, simple excision along with cauterization of the lesion site with lid repair was done.

For cases of malignant eyelid tumours wide local excision with 4-5mm margin clearance was done and the specimen was sent for histopathological examination. After histopathological confirmation of Meibomian gland malignancies, in patients with nodular thickening of upper eyelid wide excisional biopsy was done and the colobomatous defect was repaired with Cutler Beard technique Stage I done with a full thickness cutaneous conjunctival inferior eyelid advancement flap. After six weeks secondary reconstruction using Cutler Beard stage II reconstruction technique was done. For two patients with advanced Basal cell carcinoma as the tumours were inoperable with orbital infiltration the patients were referred to radiotherapy. However one patient with Basal cell carcinoma was not willing for surgery and lost follow up there after.

In a study by Gunduz et al malignant eyelid tumours were managed by wide tumour excision with 5mm surgical clearance and full thickness defect after was treated with appropriate flap techniques. Standard surgical excision of tumour free margin of 4mm was recommended for basal cell carcinoma and 4 to 6mm for squamous cell carcinoma. They also suggested Hughes tarsoconjunctival flap reconstruction technique for lower eyelid defect and Cutler Beard, two stage flap reconstruction procedure for upper eyelid defect of more than 50% and Tenzel flap reconstruction for defects between 25-50%.

In advanced malignant tumours with orbital and globe infiltration, the patient will need adjuvant chemotherapy and radiotherapy in consultation with an Oncologist and orbital exenteration should be done as primary procedure to prevent mortality.

V. SUMMARY & CONCLUSION

Benign eyelid tumours are more common than Malignant eyelid tumours. Lipodermoid cyst was the commonest benign tumour followed by papilloma and intra dermal nevus. Basal cell carcinoma was the commonest malignant eyelid tumour followed by Meibomian gland carcinoma. Simple excision of the tumour was the commonest procedure for benign eye lid tumours and excision of the tumour followed by lid reconstruction procedures was done for malignant eye lid tumours. In advanced cases of malignant tumours adjuvant chemotherapy and radiotherapy are needed followed by orbital exenteration to prevent mortality.

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