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Case report

MUCOEPIDERMOID CARCINOMA OF EYELID - AN UNUSUAL SITE: A CASE REPORT

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ABSTRACT

Mucoepidermoid carcinoma is predominantly a malignancy of the major salivary glands (10-30%) and minor salivary glands (15%).These tumours are also reported in lacrimal glands, conjunctiva, and nasopharynx, though rarely. The average age at presentation is between 20 to 60 years with a female preponderance. Owing to the rarity, it mandates an early diagnosis to facilitate appropriate patient management. This case report highlights the unusual occurrence of primary mucoepidermoid carcinoma of the eyelid in a 33 year old male patient.

Keywords: Mucoepidermoid carcinoma, Eyelid, Low grade

INTRODUCTION

Mucoepidermoid carcinoma is a tumour composed of neoplastic mucin producing cells and epidermoid cells. This tumour predominantly involves salivary glands, but literature provides evidence of its occurrence in the conjunctiva, lacrimal glands and nasopharynx.[1] Eyelid is a specialised tissue consisting of epidermis, dermis, sebaceous glands and sweat glands. Malignant tumours arising from the eyelid are rare. Basal cell carcinoma and squamous cell carcinoma are the most common malignant tumours arising from the eyelid.[3]But mucoepidermoid carcinoma of the eyelid is a rarely encountered malignancy.

CASE REPORT

A 33 year old male patient presented with a swelling over the left upper eyelid which was present since two years. There was no history of pain.

Local examination revealed a solitary, irregular, non-tender, indurated nodule over the left upper eyelid, measuring 2 × 2 mm. It showed restricted mobility in all directions. There was no surface ulceration. The borders were ill-defined. A clinical diagnosis of hidradenoma was offered by the clinician. The patient underwent triangular excision and the resected specimen was submitted for histopathological examination.

Microscopic examination: The overlying stratified squamous epithelium was thinned out. The subepithelium showed a well- circumscribed tumour, which was seen to arise from the epithelium at one focus. (Figure 1) The tumour was composed of pleomorphic cells arranged in sheets, clusters and tubulo-glandular patterns. (Figure2) The individual cells were predominantly squamoid in nature and were interspersed with mucin secreting cells. (Figure 3) The glands were lined by flat cuboidal epithelium which exhibited focal snouting. (Figure 4) Also seen were intra-glandular mucin and focal islands of mucin within the stroma. (Figure 5)

With these findings, a histopathologic diagnosis of a low grade muco-epidermoid carcinoma (MEC) was arrived at.

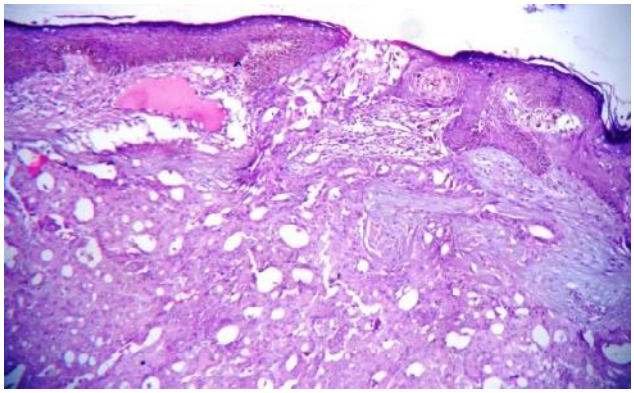

Fig 1: Section from the tumour depicting the origin from the epithelium at one focus. (H&E,40×)

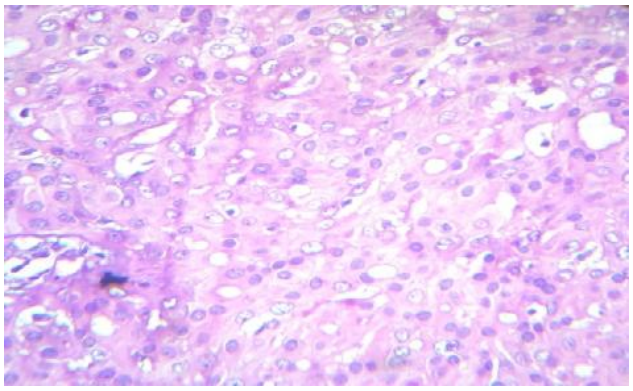

Fig 2: Section from the tumour depicting the squamoid component. (H&E,400×)

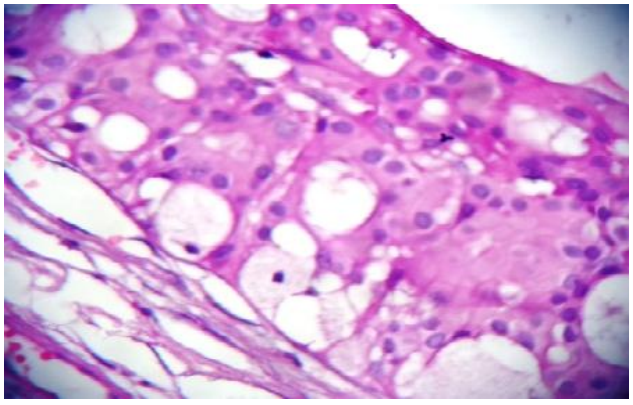

Fig 3: Section from the tumour showing squamoid tumour cells with interspersed mucin secreting cells. (H&E,400×)

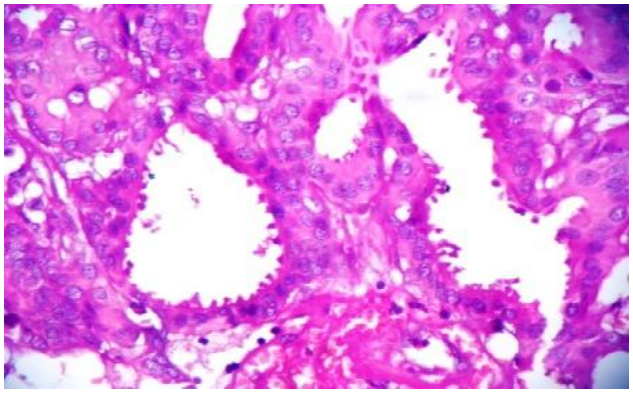

Fig 4: Section from the tumour showing glandular component with cells exhibiting focal snouting. (H&E,400×)

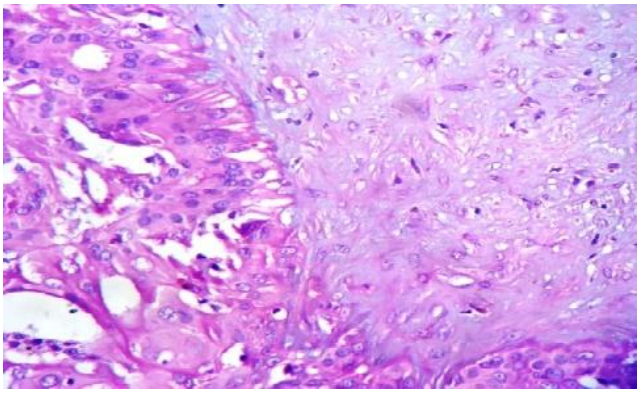

Fig 5: Section from the tumour intra-glandular mucin and focal islands of mucin within the stroma. (H&E,400×)

DISCUSSION

Though the salivary gland is the commonest site of occurrence for mucoepidermoid carcinoma (MEC), it has occasionally been reported in the upper respiratory tract, oesophagus, nasal mucosa, maxilla, mandible, liver, cervix, penis and the anus.[2] But, ocular involvement by this tumour has rarely been reported. Clinically, the tumour can present as a plaque like lesion, papillomatous or a pedunculated nodule.[3] In contrast, the tumour in the present case, presented as a sessile, painless nodule. Intra-ocular extension has been reported in a few cases.[4]A detailed examination excluded intra-ocular extension of the tumour in this case.

The eyelid is a specialized tissue, which is covered by epidermis and dermis with hair follicles, sebaceous glands and sweat glands. The interior layer of the eyelid is a mucous membrane containing scattered mucin secreting goblet cells.[5] Therefore, any tumour arising from the eyelid can show differentiation towards mucin secreting cells as well as squamous cells. This can eventually give rise to a mixed pattern within the tumour, as seen in this case of ocular MEC.[3]

The tumour may be graded based on the three-grade scheme point system as proposed by Armed Forces institute of Pathology[6]as, 2 points for intra-cystic component greater than 20%-, 2 points for neural invasion, 3 points for necrosis, 3 points for four or more mitoses per 10 HPF and 4 points for anaplasia. The total score is calculated to grade the tumour.[5]

Low grade tumours have a score between 0-4.intermediate grade tumours have a score between 5 -6 and higher grade tumours have a score of 7 or more.[6]

Based on the above mentioned grading scores, the tumour in the present case was graded as a low- grade tumour.

Various studies have reported 98% survival rate for patients with low grade MEC and 42% for those with high grade tumours.

CONCLUSION

MEC of eyelid mandates an early recognition since the chances of missing it are high owing to its rarity.

REFERENCES

1. Blake J, Mullaney J, Gillan J. Lacrimal sac mucoepidermoid carcinoma. British Journal of ophthalmology. 1986;70:681-85
2. Hemalatha AL, Sharath Kumar HK, Geetanjali S, Giripunja M, Shashikumar S D. Nasopharyngeal mucoepidermoid carcinoma-A common entity at an uncommon location. Journal of Clinical and Diagnostic Research. 2014;8(1):164-165
3. Jyothirmay B, Manoj D, Nirmala S.Mucoepidermoid carcinoma of the lower lid-report of a case. Indian Journal of ophthalmology.1996;44(4):231-33
4. Brownstein S. Mucoepidermoid carcinoma of the conjunctiva with intraocular invasion. Ophthalmology. 1981;88:1226-30
5. Victor P Eroschenko. di Fiore's-Atlas of histopathology with functional correlations. 12th edition.
6. Juan Rosai MD. Rosai and Ackerman Surgical Pathology. 10th edition;26(2):247.