LIMBAL PSEUDOEPITHELIOMATOUS HYPERPLASIA

(Case Report)

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MJAFI 1999; 55 : 67-68

KEY WORDS : Limbal tumours; Pseudoepitheliomatous hyperplasia.

Introduction

The corneal limbus is a transition zone between the cornea and the sclera where the stem cells originate, and it is not surprising given the amount of normal physiologic cellular activity that takes place in this region that it is the preferred site for tumours to develop. The occurrence of cystic, inflammatory or degenerative lesions at this site usually results in further diagnostic difficulties. We report one such case of a limbal tumour in an old male.

Case Report

A 65-year-old male presented with the history of painless, slowly growing mass of 6 months duration over the nasal limbus of the left eye. On examination the mass measured 0.7 x 0.7 cm, it had tiny lobulations, and it was vascular and very friable. Vision in each eye was recorded as 6/6. Both eyes were normal in every other way with IOP of 17.6 mm Hg. There was no regional lymphadenopathy. The patient was taken up for excision biopsy under local anaesthesia. The entire mass was dissected free of the limbus followed by local cryo application over the raw area. Histopathology of sections of the tissue showed stratified squamous keratinised epithelium having marked hyperkeratosis and parakeratosis. The basal lamina was intact but disorderly proliferation of squamous epithelium was seen in the form of groups of cells with

hyperchromatic, irregular nuclei, individual cell keratinization and presence of some benign epithelial pearls. There was mildly increased mitotic activity but no evidence of malignancy. Based on these findings a diagnosis of pseudoepitheliomatous/pseudocarcinomatous hyperplasia was made. At 6 months follow up there had not been any recurrence of the tumours.

Discussion

The limbus being a transition zone is the preferred site for tumours to develop. The list includes neoplasms, cysts and inflammatory swellings. Benign neoplastic lesions are benign melanoma, papilloma, dermo-fibrolipoma and angioma. Malignant neoplasms include malignant melanoma, squamous cell carcinoma and epithelial hyperplasia. Cystic swellings encompass congenital dermoid cyst, retention cyst, implantation cyst and parasitic cyst. Polyp and granuloma are examples of inflammatory swelling. More commonly the lesion maybe a pterygium or phlycten. Pseudoepitheliomatous hyperplasia (PEH) is rarely mentioned.

PEH can arise from pre-existing stromal inflammation or from lesions such as pinguecula or pterygia.

Fig. 1 : Lesion involving nasal limbus of left eye

Fig. 2 : Section of mass showing PEH (H & E 10X)

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Actinic (senile) keratosis is similar to PEH except that features of greater degree of cellular atypia are present. This is a pre-cancerous lesion [1].

PEH is a benign reactive proliferation of the conjunctival or corneal epithelium. The lesion develops rapidly over weeks or few months. Clinically it is a white elevated mass with a hyperkeratotic surface and sometimes an area of central umbilication similar to that seen in keratoacanthoma.

Clinical distinction between PEH and squamous cell carcinoma is difficult when the former occurs at the limbus; however, a history of rapid proliferation and lack of regularly arranged vascular fronds is use-

ful in distinguishing this lesion from squamous cell carcinoma and squamous papilloma [2].

The case report emphasizes the necessity of performing excision biopsy of tumours arising at the limbus as clinically it is not possible to differentiate between benign, malignant and potentially malignant lesions.

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