

Pigmented Invasive Squamous Cell Carcinoma of the Conjunctiva in a Young Nigerian Female – A case report

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ABSTRACT

Squamous cell carcinoma of the conjunctiva (SCCC) rarely presents as a pigmented lesion. This report is on a 32-year-old healthy Nigerian female who presented on account of a 6-month history of left ocular irritation with associated increase in the size of a supposed 'birth mark' which had been present in the left eye for 6 years. Six years prior to this she had noticed a dark patch in the left eye which had shown no changes until 6 months to the time of presentation when it started to increase in size with associated telangiectasia. Examination did not reveal obvious leukoplakia. Histology showed invasive squamous cell carcinoma of the conjunctiva.

There have not been many reported cases of pigmented squamous cell carcinoma of the conjunctiva among Nigerians. Such pigmentation might have resulted from secondary acquired melanosis. Of interest in this case is the presence of a pre-existing dark patch at the site of the lesion which could have been due to racial melanosis or conjunctiva nevus as there was no prior histological evaluation. A histological examination of some of the supposedly innocuous pigmented conjunctiva lesions was recommended.

Key words: squamous cell carcinoma, conjunctiva, pigmented, Nigerian

INTRODUCTION

Conjunctival squamous cell carcinoma (SCCC) typically presents clinically as a raised amelanocytic gelatinous mass with leukoplakia¹ although among blacks such lesion could be pigmented due to secondary acquired melanosis.² Even at that, not many of such cases have been reported among African Nigerians. This report describes a case of pigmented invasive squamous cell carcinoma of the conjunctiva in a young Nigerian female.

CASE REPORT

A healthy 32-year-old woman reported to the eye clinic with a 6-month history of left ocular discomfort associated with increase in the size of a dark patch that had been present in the temporal interpalpebral area of the left eye for about 6 years. The lesion had remained asymptomatic since it was noticed 6 years before.

Six months prior to presentation, the patient started to experience irritation and occasional itching in the left eye. Also the dark patch which was initially flat was becoming raised with obvious telangiectasia. There was no contact bleeding. There was also no reduction in vision and no ocular discharge. The right eye showed no similar dark lesion. There was no history of ocular trauma. The patient's last childbirth was 2 years prior to presentation. The dark lesion showed no change while she was pregnant.

Systemic health history was negative. Ophthalmic examination showed a best corrected visual acuity of 20/20 in both eyes. Biomicroscopy of the left eye showed a dark brown conjunctival mass at the temporal limbus abutting on the cornea, measuring 8*3*2mm (figure 1). There were dilated conjunctival blood vessels leading into the mass. There was no obvious leukoplakia. Human immunodeficiency virus test was negative.

A diagnosis of atypical melanosis was made with a differential of pigmented squamous cell carcinoma and malignant melanoma. The tumour was excised by partial lamellar sclerokeratoconjunctivectomy with a 3mm lesion-free margin and the lesion bed treated with 5-fluorouracil (50mg/ml).

Histological examination showed an epithelial neoplasm arising from the overlying stratified non-keratinizing squamous epithelium. The neoplastic cells were squamoid and depositing keratin within the stroma. There were occasional tumour giant cells and mitotic figures were infrequent. Some of the cells were also pigmented (figure 2).

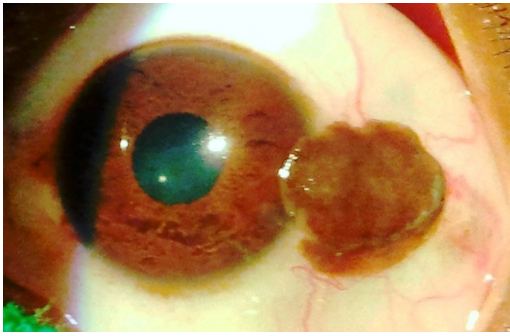


Figure 1. Clinical appearance of the pigmented lesion.

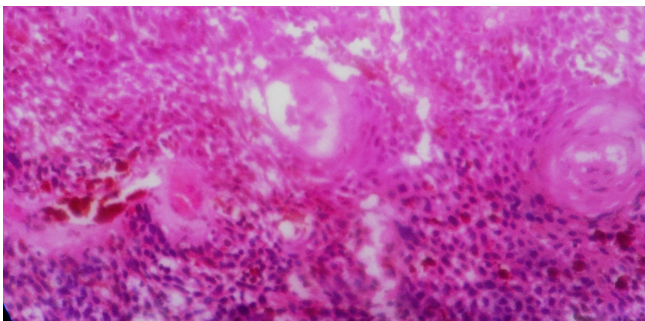


Figure 2. Histopathology of the lesion at x40 magnification showing epithelial neoplasm arising from overlying stratified non-keratinizing squamous epithelium.

DISCUSSION

Conjunctival squamous cell carcinoma presents typically as a non-pigmented lesion but secondary acquired melanosis may cause pigmentation.

The incidence of pigmented squamous cell carcinoma of the conjunctiva is said to be more common among blacks than Caucasians,³ however, most of the clinicopathological reports on intraepithelial and invasive squamous cell neoplasm of the conjunctiva recently reported among Nigerians^{4,5} have not supported this as non of the cases reported was pigmented. Adefule et al,⁶ about three decades ago, reported a case of pigmented squamous cell carcinoma of the conjunctiva in a young Nigerian, similar to the present case. A clinical differential diagnosis of malignant melanoma in this patient might not be completely out of place. Shield et al⁷ itemized some criteria that could be helpful in differentiating squamous cell carcinoma of the conjunctiva from malignant melanoma. Not in consonance with a diagnosis of squamous cell carcinoma of the conjunctiva in this case is the young age of the patient, the absence of clinically-apparent leukoplakia on biomicroscopy and the presence of the long-standing pigmented lesion at the site where the lesion started. The pigmented lesion could have been a benign acquired epithelial melanosis (racial

melanosis) or a conjunctival nevus, as there was no histological evaluation prior to the time when the patient presented.

Nevus cells in junctional and compound nevi have been shown to have potential for malignant transformation although most often to malignant melanoma.

The role of benign acquired epithelial melanosis (racial melanosis) in pigmented squamous cell carcinoma may not be entirely coincidental. Shield et al³ in a review of 5 cases with pigmented squamous cell carcinoma of the conjunctiva in situ reported 3 of the cases as having racial melanosis. Also the case reported by Adefule et al⁶ also had a background of racial melanosis of the conjunctiva. However racial melanosis is often expected to be bilateral even though asymmetrical.⁸ In this case, there was no pigmented lesion in the patient's other eye.

Pigmentation in squamous cell carcinoma of the conjunctiva may also be due to secondary acquired melanosis.²

In conclusion, there may be a need for histological evaluation of patients with supposedly innocuous pigmented lesions as some of such lesions may have potential for malignant transformation.

Declaration of Interest:

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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