

Case Report

Cutaneous squamous cell carcinoma in a disseminated discoid lupus erythematosus lesion

Gayathre S. P., Niranjana Kumar, Tharani Rajeswaran*

Institute of General Surgery, Madras Medical College, Chennai, Tamil Nadu, India

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*Correspondence:

Dr. Tharani Rajeswaran,

E-mail: anu.tharani94@gmail.com

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ABSTRACT

The incidence of skin cancers is low in India when compared to the western world. Malignant transformation of discoid lupus erythematosus (DLE) is a rare entity. Most common site is head and neck. Our case reported is a disseminated DLE with malignant transformation to squamous cell carcinoma (SCC) of a lesion over arm with axillary node involvement. We proceeded with wide local excision and axillary node dissection.

Keywords: SCC, DLE, India

INTRODUCTION

The reported incidence of skin cancer in India is less than 1% of all the cancers.¹ Although the incidence of all types of skin cancers is thought to be lower among Indians due to the protective effect of melanin, there are several smaller reports that non-melanoma cutaneous tumors may be on the rise in India.¹ SCC is the most common form of skin cancer.³ SCC most commonly appears after the age of 50.² Risk factors for Non melanoma skin cancers are environmental, chemical exposures, chronic cutaneous inflammation, immunosuppression, fair phenotype, and previous history of skin cancer. Among environmental risk factor important ones are UV radiation, indoor tanning, ionizing radiation, and psoralen UVA (PUVA) therapy.² Most common sites are face, neck, bald scalp, extensor forearms, dorsal hands, and shins.³

DLE is a benign autoimmune chronic inflammatory skin disease.⁴ Malignant transformation on DLE lesion is a rare complication.⁴ Incidence of SCC over DLE in the Indian population is found to be 0.98% to 3.4% with a male-to-female ratio of 1.6:1.^{4,7,9} The interval between development of DLE and SCC has varied from 4 to 20 years.⁴ SCC arising from DLE lesions has worse outcomes in terms of metastasis, recurrence, and death

when comparing it to conventional squamous cell cancer of the skin.^{5,6}

DLE is subdivided into a localized form in which lesions are confined to the face and neck or a disseminated form in which lesions also occur elsewhere on the body. Malignant transformation is a rare complication of this condition. This is a case of SCC developing over lesions of disseminated DLE. The paucity of reports of this complication on in literature search warrants its mention.

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CASE REPORT

A 51-year-old male with disseminated DLE presented with an indurated ulceroproliferative growth over previously existing skin lesions of left arm for the past 3 months which bleeds on touch with minimal serous discharge, not associated with pain. He had developed hyperkeratotic skin lesions over extremities, torso, and trunk for the past 15 years without any proper medical management.

On examination there was a 12x10 cm irregular indurated ulceroproliferative growth over the lateral aspect of left arm involving 1/3 of circumference of the left arm extending 15 cm below acromian process to 5 cm above olecranon process with irregular margin, everted edges, minimal serosanguinous discharge. Hyperkeratotic plaques were seen over the superomedial and inferior aspect of the growth. Examination of the left axilla revealed a 1x1 cm firm non tender freely mobile node in the medial wall of the axilla.

MRI of the arm and axilla revealed that the lesion was confined to the cutaneous and subcutaneous layer with a single ipsilateral axillary node. Biopsy taken from the growth showed moderately differentiated SCC.

So, it was diagnosed to be a case of long standing disseminated DLE undergoing a malignant transformation to SCC.

Since the mainstay treatment of cutaneous SCC is surgery, the patient was taken up for wide local excision with a margin of 1 cm and axillary node dissection. And the patient was started on hydroxychloroquine and steroids for active lesions.

Histopathology of the specimen showed moderately differentiated infiltrating SCC with all the margin free of tumor and 1 out of 15 nodes was positive, with lympho-

vascular invasion and the pathological staging was pT3N1Mx.

Skin grafting was contemplated for the raw area but deferred because of the surrounding active discoid lesions and was allowed to heal by secondary intention and radiotherapy was also deferred for this patient for the same.



Figure 1: Ulcer proliferative growth over left arm developed over previous skin lesion.



Figure 2: Active DLE lesions all the torso and extremities.



Figure 3: Intraoperative picture following wide local excision.



Figure 4: post operative day 8.



Figure 5: Postop follow up- 30 days raw area.

DISCUSSION

DLE is the most common form of cutaneous lupus erythematosus.⁸ It is characterized by erythematous indurated well defined scaly plaques of variable size, that resolve with atrophy, scarring and pigmentary changes.¹⁰ DLE is subdivided into a localized form (80%) in which lesions are confined to the face and neck and a disseminated form (20%) in which lesions can arise anywhere in the body.⁸ Malignant transformation of DLE lesions is common with disseminated type than localized type.

Although the pathogenesis of SCC development within DLE lesions is unknown, 2 hypotheses have been proposed. First, hypopigmented DLE plaques may predispose the lesions to actinic damage, which has been implicated in SCC. Second, the chronic scarring from DLE, in combination with constant local inflammatory stimuli, might be associated with carcinogenesis.¹⁰

Treatment for cutaneous SCC is wide local excision with lymph node dissection if required followed by radiotherapy to the tumor bed. Chemotherapy can be given if there is any systemic spread. But in our case,

only wide local excision with axillary lymph node dissection was done, radiotherapy could not be given as active DLE lesion is a contraindication for radiotherapy. In addition to that, margins were negative which was favorable in terms of not subjecting the patient to radiotherapy.

In our case we did not proceed with reconstruction procedures for the local site. Reconstruction can be done with grafts or flaps if favorable situations are seen which results in better wound healing.

CONCLUSION

SCC of skin in DLE is a rare in Indian patients. Our patient had a successful outcome with the excision of the tumor. Proper treatment of the underlying disease with regular follow up is required. Any recent or rapid changes in the previous lesions should have a proper histopathological examination. Photoprotective measures should be carried out.

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