Squamous cell carcinoma arising in discoid lupus erythematosus lesions in two females

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Abstract

We describe two females with long-standing extensive Discoid Lupus Erythymatosus (DLE) who developed squamous cell carcinoma on the scarred lesions on scalp.

This rare but well kr own complication has to be detected early, to avoid metastatic disease.

Introduction

DLE is an autoimmune disorder frequently affecting females in the 4th decade. Well defined pinkish scaly plaques, which heal with atrophy and pigmentation are typically found on face, scalp, ears, upper chest, lips, and oral mucosa. DLE type of skin lesions are found in patients with systemic Lupus Erythematosus (SLE) also. Untreated DLE lesions tend to be persistent and Squamous cell carcinoma is a rare complication, which can occur.

Case reports

Patient No 1 – is a 30 yr old unmarried female. Diagnosis of Discoid Lupus Erythematosus was made 6 years back and oral steroids were prescribed. She has been very irregular in taking medication and developed a flare up of the disease with fever, arthralgia and marked photosensitivity in march 2004. In June 2004 she was found to have wide spread DLE lesion on the face, chest and arms. There were large DLE plaques on the scalp with scarring alopecia. On the Scarred areas of the scalp 4 crusted nodules (diameter 1x1.5 cm. 2x2.5 cm, 2.0xl.5 cm, 1.5xl.3 cm) were noted. These were surrounded by erythema and satellite lesions (fig 1).

Investigations revealed ESR of 120 mm/h and positive Anti nuclear factor. Anti Double stranded DNA antibodies were negative. Haematological, renal and liver functions tests and chest x-ray were normal.

Histology of nodules: The superficial dermis showed a dense inflammatory infiltrate. Few clusters of dyskeratotic atypical squamous cells with hyperchromatic nuclei are present.

Complete wide excision and skin grafting was performed. Presently the patient is on Hydroxychloroquine, Prednisolone and topical sunscreens. She follows the clinics regularly.

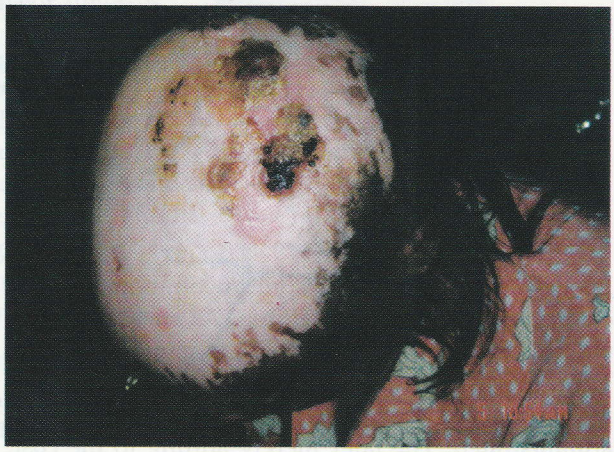

Figure 1. *Scalp lesions of patient No 1.*

Patient No 2 – is a 6 years old married female. She has been diagnosed as having Systemic Lupus Erythematosus 20 years ago. In the initial stages she has had constitutional symptoms, arthralgia and skin lesions. Photosensitivity scarring alopecia, widespread DLE lesions and vasculitic, skin lesions were present from the onset. She developed small ulcers on the scalp 3 years back.

Repeated biopsies did not reveal any evidence of malignancy. In June 2003 she developed pain in the ulcers, which were getting larger. Biopsy revealed a moderately differentiated squamous carcinoma. This was treated with radiotherapy, but complete healing did not occur. In June 2004 she presented with a crusted nodule of 1.2x1.0 cm size over the parietal region of the scalp. There was marked scarring alopecia of the scalp and extensive DLE lesions on the face, upper limbs and chest. Her ESR was high (65 mm/1st hr) and ANF was +ve. Other investigations were normal.

Biopsy was performed and histology confirmed the recurrence of an Invasive well differentiated squamous cell carcinoma.

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Discussion

Occurrence of neoplasia is a rare complication of DLE. Sqamous cell carcinoma (SCC) is the most common neoplasm reported[1,6,7] to occur in DLE. In addition. keratoacanthoma[2], malignant fibrous histiocytoma[3], and atypical fibroxanthomas[4], are also known to occur.

Squamous cell carcinoma especially occur in DLE scars over the scalp ears, nose and lips[5]. An incidence of 3.3% has been noted in a study of 120 white patients with DLE. Development of SCC is most common in middle aged males. However it may occur in either sex if the lesions are more than 20 years old. SCC has been considered as more common in patients who have undergone radiotherapy for DLE, but history of receiving radiotherapy is absent in most of the patients described in the literature[1]. This rare complication was detected in two patients attending the skin clinic NHSL within a period of three months. One of these two patients developed it after a relatively short duration of making the diagnosis of DLE. Patient with DLE are not uncommon in Dermatology clinics in Sri Lanka However, occurrence of neoplasia in DLE lesion is not reported prior to this in Sri Lanka. We wish to highlight the need for thorough examination and histological evaluation of suspicious lesion which is of paramount importance in early detection of this condition which can lead to multiple metastases resulting in death.

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