

SQUAMOUS CELL CARCINOMA ARISING FROM MORPHOEA

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A case of squamous cell carcinoma arising from morphoea in a 45-year-old male is presented. The diagnosis of morphoea and squamous cell carcinoma was confirmed by histopathological examination. To our knowledge this is the first such case to be reported in literature.

Key Words : Morphoea, Squamous cell carcinoma

Introduction

Squamous cell carcinoma rarely if ever occurs in normal skin, but usually arises from skin damaged by actinic rays.¹ Exposure to chemicals like coal tar, arsenic, soot and a variety of oils and distillation products were also causes for squamous cell carcinoma.² It occasionally occurs in scars following inflammatory or degenerative processes. In this communication we record a case of squamous cell carcinoma arising from morphoea.

Case Report

A 45-year-old male patient reported with a complaint of having a chronic ulcer in the left anterior chest wall gradually increasing in size for 2 to 3 months. He also complained of a large hyperpigmented patch involving the anterior chest wall extending on to the back which was diagnosed as morphoea in 1981 and was treated with chloroquine tablets and vitamin B complex capsules for 12 years. From 2 to 3 months back he developed itchy sensation in a localized area at the left anterior chest wall just below the nipple over the previously diagnosed lesion of morphoea. He used to scratch this area off and on and it got ulcerated. This ulcer was small to start with

and it gradually increased in size. According to the patient it was treated with oral drugs and various dressings over the last 2 months. Instead of healing the ulcer became worse and he noticed small nodular lesions at the base of the ulcer.

On examination the patient had several large and small brownish black lesions which had many scattered depigmented areas. One

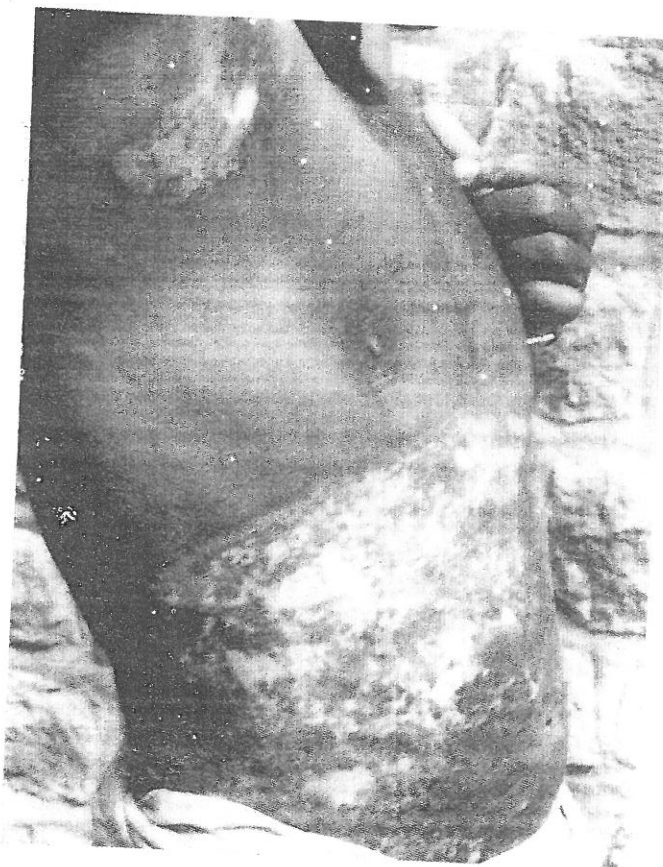


Fig. 1. Hyperpigmented skin lesion of morphoea with diffuse areas of depigmentation in the right axilla and chest wall

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lesion was over the left lower part of the anterior chest wall extending on to the abdomen, to the inguinal region and also to the back. The skin over the lesion was tight and had a smooth surface. He had another 5 much smaller lesions of similar appearance in the right axilla (Fig. 1), right forearm, left axilla, left groin and left thigh. The large skin patch over the chest wall had an irregular configuration. At the edge of this lesion on the anterior chest wall just below the nipple there was a irregular ulcer measuring 5cm x 4 cm (Fig. 2). The margin of the ulcer was slightly



Fig. 2 Carcinomatous transformation of the lesion in the chest wall just below the nipple.

indurated. The base of the ulcer had small elevations giving a cauliflower-like appearance. A biopsy of the ulcer was done. A biopsy of the skin lesion was also done to confirm the diagnosis of morphea. Routine blood examination showed the following results.

Haemoglobin was 16.8%. Total white blood cell count was 8600/cmm. Differential count was normal. Chest X-ray was normal.

The biopsy from the skin lesion showed epidermis with flattening of the rete ridges. In the dermis the significant finding was the complete absence of skin adnexa and homogenization of the dermal collagen (Fig. 3). The reticular dermis was thickened

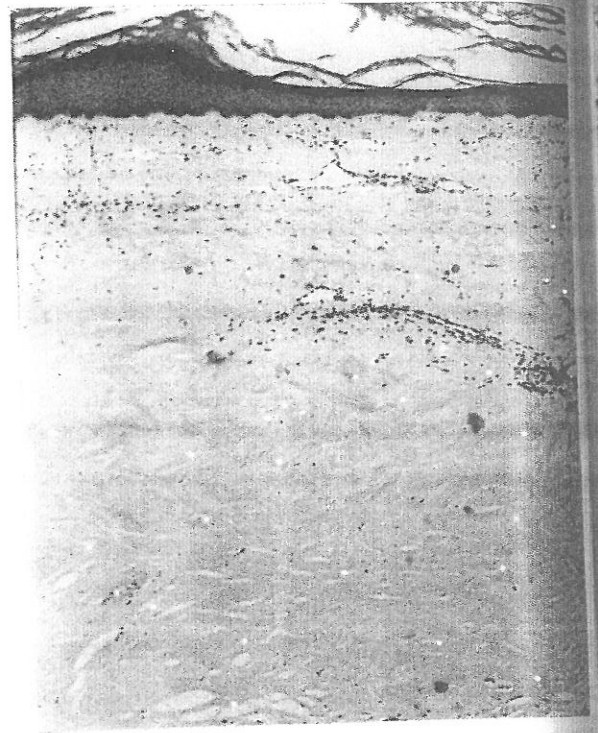


Fig. 3 Skin with homogenization of the dermal collagen and absence of skin adnexa (H and E x 40)

and stained deeply eosinophilic. The subcutaneous tissue was almost completely replaced by collagen. This histopathologic appearance confirms the diagnosis of late stage of morphea.

The biopsy of the ulcer showed irregular proliferation of stratified squamous epithelium. There was dyskeratosis, marked pleomorphism of the epithelium and invasion of the deeper tissue with malignant epithelial cells (Fig. 4). Some reactive fibrosis was present. There was paucity of inflammatory changes. The lesion was diagnosed as squamous cell carcinoma. The patient was

referred to a cancer hospital for further treatment.

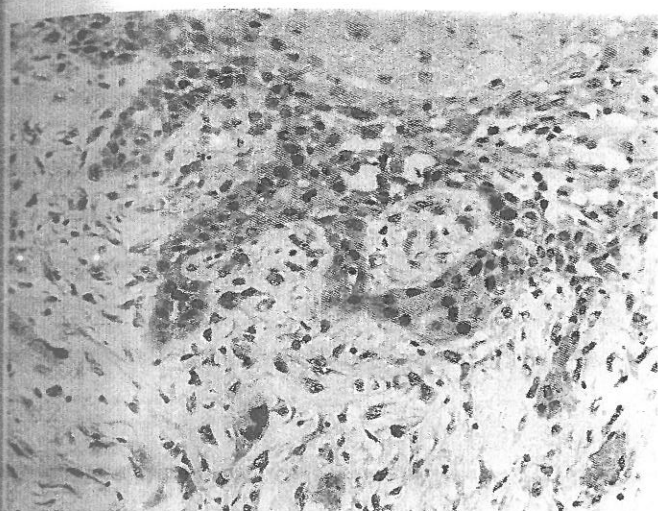


Fig. 4 The invading epithelial cells showing pleomorphism and anaplasia (H and E x 200)

Comments

Squamous cell carcinoma of the skin usually presents clinically as a shallow ulcer with an elevated indurated border. In this case the edge was only slightly indurated there was no elevation of the border. The middle of the ulcer was raised, granular and had a cauliflower-like appearance. Clinically the lesion looked like a chronic ulcer with exuberant granulation tissue and there was no suspicion of cancer. Biopsy examination revealed a moderately well differentiated squamous cell carcinoma.

There are reports of cases in which squamous cell carcinoma had arisen from cutaneous scars from burns,² X-rays³ and sinuses of chronic osteomyelitis.⁴ Recently squamous cell carcinoma associated with chronic plantar ulcers in leprosy had been reported.^{5,6} In this instance the patient had cutaneous scars following morphoea for 12 years. The patient felt itchy and scratched the area often. It is reasonable to suggest that the etiopathogenesis of malignant transformation of the epithelium in this case could be same as in other instances where scarring and chronic irritation had produced squamous cell carcinoma.^{2,4}

Acknowledgement

We are grateful to the American Leprosy Missions Inc., for their financial support and to Mr N Baskar for secretarial assistance.

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