CASE REPORTS

SCAR SARCOIDOSIS - SPARING POST SURGICAL SCAR

S Muralidhar, S Handa, VK Sharma, B Kumar, G Mitali

Infiltration of old scars by sarcoidal granuloma is not uncommon. However, the pathogenesis of scar sarcoid is not clear. Peculiar involvement of road traffic accident scars by granulomatous infiltrate but sparing of post operative scar, in our patient suggests that foreign body contamination is essential in the evolution of scar sarcoid. Scar sarcoid can have systemic involvement at the outset, in contradistinction to the earlier reports as illustrated in our patient. Corticosteroids are effective in the treatment of these patients.

Key Words : Scar sarcoid, Accident scar, Surgical scar, Foreign body, Pathogenesis

Introduction

Infiltration of old and new cutaneous scars by granulomatous process in sarcoidosis is not uncommon and 3-4% of patients, have involvement of scars. Post- surgical, post traumatic and scars secondary to ritual scarification are known to be involved.[2]

We describe a rare case with involvement of road accident scars with sparing of post cholecystectomy scar and discuss its significance in the pathogenesis of this enigmatic disease.

Case Report

A 55-year-old edentulous Indian woman presented to the hospital with complaints of irritation and swelling over the scars of her face, scalp and fingers for the past 8 months. Initially it started with the lesion over her right cheek but gradually extended over to the inner canthus of the right eye. Subsequently she noted asymptomatic soft swelling over the scalp and fingers. On specific questioning, she revealed a history of exertional dyspnoea of seven months duration.

Examination of the face revealed linear erythematous plaques along the lines of scar over the nose and below the right eye. The lesion over the nose extended to the cheek and was studded with small papules and a few telangiectatic spots. The lesions were not adherent to the underlying bone. In addition the patient had soft cystic skin-coloured swellings 2-3 cm in size, located across the scars over the finger tips, thumb and scalp. Aspiration failed to reveal any evidence of fluid.

Her four-year-old cholecystectomy scar was not involved. Examination of the eyes, genitalia, mucous membranes, nails and hair revealed no abnormality. She had enlargement of anterior cervical and axillary lymphnodes on the left side. The lymphnodes were 1-2 in number and measured 1-1.5 cm in size. They were dis-

From the Departments of Dermatology, Venereology and Leprology, and Pathology, Postgraduate Institute of Medical Education and Research, Chandigarh - 160 012, India.
Address correspondence to :
Dr. VK Sharma

crete, firm and non tender. There was no organomegaly. Examination of the cardiovascular and central nervous systems were within normal limits.

Auscultation of the chest revealed late inspiratory crepitations in the inframammary, infraclavicular, infrascapular and infraaxillary areas on both sides.

Routine investigations including hemogram, serum electrolytes, renal and hepatic function tests were within normal limits. Serum calcium and phosphate and 24 hours urinary calcium and phosphate were also within normal limits.

Her electrocardiogram, pulmonary function tests and gas diffusion studies revealed no abnormality.

Skiagram of the chest showed bilateral hilar lymphadenopathy and also involvement of the parenchyma. X-ray of the hands showed a cyst in the terminal phalanx of middle finger. Histopathological examination of the skin (face and hand lesions) and a lymphnode biopsy (cervical) revealed sarcoidal granuloma. A polaroscopic examination of the skin biopsy did not reveal any foreign body.

The patient was started on 40 mg of prednisolone because of lung and bone involvement which was gradually tapered to a dose of 10 mg on alternate days. Her skin infiltration flattened within two weeks.

Discussion

Scar sarcoidosis, a common presentation among West Africans,[3] was first described by Caesar Boeck, way back in 1899.[4] Since then, there have been many case reports and even a few series on scar sarcoid.

Scars resulting from various causes like surgery, tattoos,[1] venipuncture,[2] shell explosion,[5] ritual scarification[6] and desensitization injections, may be infiltrated by sarcoidal granulomatous tissue in the form of papules and nodules after a varying period of 6 months to 59 years.[4] Scars are involved early in the course of the disease, before lung parenchymal involvement occurs,[2] and scar sarcoid is described as a benign disorder with good prognosis.[6]

In the present patient, the scars were involved after a latent period of 20 years, which is well within the range described earlier. However, this patient in contradistinction to earlier reports had extensive involvement in the form of lung parenchymal and bone involvement from the onset.

The pathogenesis of scar sarcoid has been hypothesized to be due to either foreign body contamination or due to a hypersensitivity reaction akin to erythema nodosum.[5] It has been described that the macrophages on engulfing foreign bodies, liberate angiotensin converting enzymes and lymphokines which play a role in the formation of the granuloma.[4] The involvement of road accident scars, but differential sparing of post cholecystectomy scar, might be due to the fact that there may have been foreign body contamination of the accident scars (even though nothing was detected on polaroscopy).

Thus the manifestations of scar sarcoid in this patient suggests that foreign body contamination is perhaps essential for the development of the disease, and if the lesions are extensive it calls for a thorough systemic evaluation of the disease.

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