Case Report

Infiltration of old scars: a manifestation of sarcoidosis*

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We report the case of a 41 year-old black woman who presented a sudden infiltration of old scars of her face. These scars were from a car accident 10 years prior. Histological analysis of a skin biopsy revealed non-caseous granulomas consistent with sarcoidosis, and computed tomography of the thorax revealed enlarged mediastinal lymph nodes. The lesions regressed spontaneously and no treatment was required.

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Key words Sarcoidosis/complications. Cicatrix/ethiology. Granuloma/complications.

INTRODUCTION

Sarcoidosis is a systemic, granulomatous, non-infectious disease of unknown etiology, characterized by non-caseous epithelioid granuloma in tissue, a histological finding that may be encountered in various organs.

The clinical suspicion may arise when alterations are seen in multiple organs. The identification of cutaneous lesions suggestive of the disease facilitates clinical diagnosis. Such lesions may serve as biopsy sites, thereby avoiding expensive and invasive procedures.

Sarcoidosis may present various cutaneous forms, such as nodular erythema, cicatricial alopecia, lupus pernio, papular lesions, plaque, circular welts, ulcers and infiltrations, the last variable being the most clinically characteristic and of the lowest prevalence.

The authors report the case of a 41-year-old female patient presenting a spontaneous and significant increase in old scars, a finding characteristic of the disease.

CASE REPORT

A 41-year-old black female patient, working as a cook, sought treatment at the outpatient clinic complaining of a progressive and significant increase in the size of her facial lesions for 8 months (Figure 1). She presented atrophic scars as a result of a car accident 10 years prior. The patient was hypertensive and obese. She denied having had any prior disease, having used any

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medication or having physically aggravated the site of the lesion.

Eight well-defined brownish erythematous papular keloidal lesions were found in the right malar region. These lesions were approximately 3 cm in diameter. Two diagnostic hypotheses were proposed: *dermatitis artefacta* (owing to the geometrical disposition of the lesions) and sarcoidosis over the scars. A punch biopsy was performed in one of the facial lesions.

An anatomopathological exam showed the presence of a non-caseous granuloma suggestive of sarcoidosis. Detection of acid-fast bacilli was negative in sputum and in the biopsy sample. A chest X-ray dating from 1996 presented enlarged upper, hilar and mediastinal lymph nodes, with no evidence of pleuropulmonary lesion. Another X-ray taken in 1997 showed that the hilar and right paratracheal lymph nodes were reduced in comparison to the previous test. Computed tomography scan of the chest, conducted in 2003, revealed significant and symmetrical enlargement of lymph nodes, which severely affected the ganglia in the bronchopulmonary, subcarinal, precarinal and right paratracheal chains, with no evidence of interstitial lesion (Figure 2). Radiography of the hands showed no alterations. Hemoglobin was 10.7 g/dl, hematocrit was 35%, and the leukocyte count was 3900 with 128000 platelets. The patient was strongly reactive to the Mantoux test, ionic calcium was 4.4 mg/dl, calciuria was < 150mg/24h, creatinine was 0.9, and a simple urine test showed an absence of crystals and cells. The variant surface glycoprotein was 9 mm, spirometry was normal, and ophthalmologic evaluation revealed no alterations.

The policy adopted was that of expectant treatment, bearing in mind that the disease presents oscillations and involution may occur, even with no treatment. Five months after the first evaluation, there was complete regression of the lesions (Figure 3).

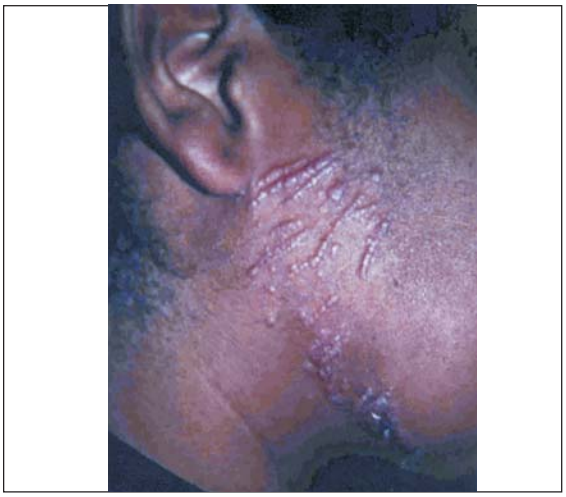

Figure 1 – Keloidal facial lesions

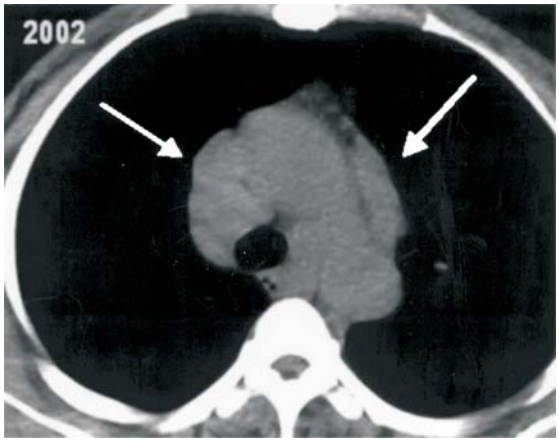

Figure 2 – Significant bilateral lymph node enlargement

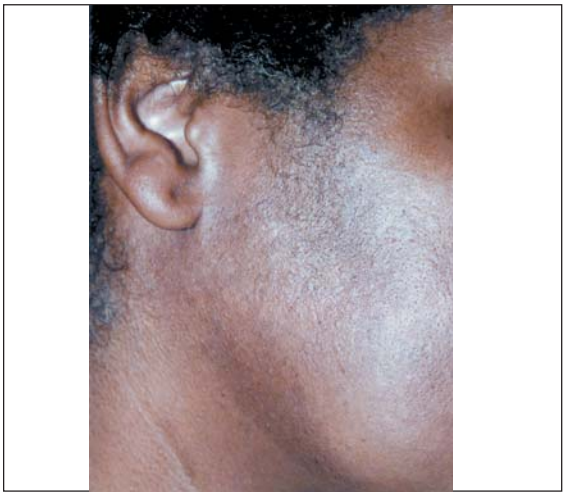

Figure 3 – Spontaneous and total regression of the lesions

DISCUSSION

Cutaneous sarcoidosis may present as an isolated symptom or may be accompanied by involvement of other organs. According to the American Thoracic Society, not all forms require systemic treatment. Only cases presenting cardiac, central nervous system, ocular or hypercalcemic

involvement should receive systemic medication. Pulmonary involvement requires no compulsory treatment unless the patient presents symptoms or experiences a loss of pulmonary function.

Skin lesions occur in a third of all cases and are seen predominantly on the face and extremities[1]. There are several cutaneous presentations for the disease, such as sarcoidosis in infiltrated plaque[2], disseminated papules with the classic jelly-like aspect and nasal infiltration in lupus pernio[3,4]. Other, rarer, manifestations include ulcerations[5-7], erythroderma[5], dactylitis[3], hypochromic lesions[3], cicatricial alopecia[5,6], fingernail lesions[6] and lichenoid eruption[6].

In addition to the manifestations cited above, there is infiltration over scars, which is one of the most specific and least prevalent forms of sarcoidosis[8]. This type of presentation is characterized by the late onset of cutaneous lesions characteristic of sarcoidosis in places of previous skin trauma. Traumas caused by tribal scarification[8], herpes zoster scars[9], tattoos[10], venous puncture[11] and desensitization injections[12] have been reported in the literature. In the Brazilian literature, there is only one reported case of sarcoidosis over previous scars[13] with no extracutaneous manifestation.

Niels et al. conducted a prospective study with 188 patients diagnosed with cutaneous sarcoidosis and found that the lungs were affected in 138. In the same study, through analyzing correlations between the cutaneous types of sarcoidosis lesions and systemic involvement, pulmonary impairment was found in 20 of the 26 cases of sarcoidosis over scars[6].

The patient currently profiled presented positive reaction on a tuberculin test, despite the fact that it is classically negative in cases of sarcoidosis. There are reports in the literature of some cases with such a positive reaction[14,15]. In a sample of 39 Irish patients, 28% presented both the kveim reaction and a positive response on the tuberculin test[16].

In search of a diagnosis, expensive and invasive tests, such as mediastinoscopy, are often conducted, exposing the patient to unnecessary risks in the attempt to obtain material for the anatomopathological study. The identification, by the clinician, of cutaneous lesions suggestive of sarcoidosis offers an easy, low-cost and safe alternative for histological confirmation of the disease.

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