

Sarcoidosis simulating syringomas^{*}

Sarcoidose simulando siringomas

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Abstract: Sarcoidosis is a granulomatous disease of unknown etiology. The skin is commonly affected. Cutaneous manifestations can mimic other diseases and autoimmune disorders. The dermatologist plays a critical role in elucidating the clinical diagnosis and assisting other specialists in the investigation of a systemic disease. We report a patient with typical cutaneous manifestation of sarcoidosis with pulmonary involvement.

Keywords: Granuloma; Sarcoidosis; Skin manifestations

Resumo: A sarcoidose é uma doença granulomatosa de etiologia desconhecida. A pele é comumente afetada. As manifestações cutâneas podem mimetizar outras afecções e desordens auto-imunes. Assim, o dermatologista assume papel fundamental para elucidar o diagnóstico clínico e auxiliar outros especialistas na investigação de uma doença sistêmica. Relatamos um caso de paciente com manifestação cutânea típica de sarcoidose associada com acometimento pulmonar.

Palavras-chave: Granuloma; Manifestações cutâneas; Sarcoidose

INTRODUCTION

Sarcoidosis is a non infectious granulomatous disease of unknown etiology. Genetic, immunologic, environmental and infectious factors apparently participate in its pathogenesis. Several organs may be affected, which permits a wide spectrum of clinical manifestations. The skin is involved in about 20 to 35% of cases. Cutaneous sarcoidosis is present in innumerable forms, which can mimic other skin diseases and autoimmune disorders. Therefore, the dermatologist plays an important role in the diagnosis of the illness. We report a case of a sarcoidosis patient whose lesions are bilateral normochromic papules in the eyelid region, associated with pulmonary involvement.

CASE REPORT

Hypertensive female patient, black, 69 years old, with onset of bilateral normochromic papules in

the upper and lower eyelid region, with discrete itching, 3 years ago (Figure 1). She denied any other symptoms. Two years ago she looked for assistance at the Dermatology Service and received the clinical diagnosis of cutaneous sarcoidosis, which was ratified by the histopathological examination. This revealed well delimited, non caseating granulomas in the dermis, with few lymphoid cells around epithelioid cells (Figure 2). The Ziehl-Neelsen and PAS staining techniques were negative, as well as the culture of biopsy material. Liver function, kidney function, hemogram, serum and urinary calcium, electrocardiogram, hands and feet X-rays without abnormalities. A chest radiograph revealed bilateral linear hypotransparencies in the lower third of lung parenchyma with bronchiectasis on the same topography. High resolution thorax tomography with contrast demonstrated multiple

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FIGURE 1: Sarcoidosis. Normochromic papules on right eyelid region

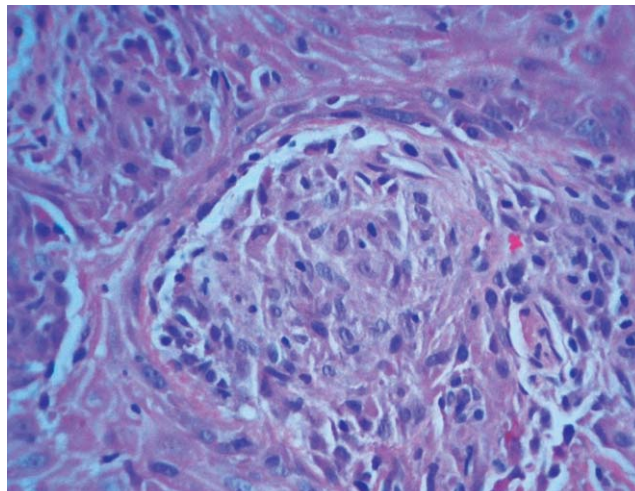


FIGURE 2: Sarcoidosis. Histiocytes with concentrically disposed eosinophilic cytoplasm form the granuloma, with few lymphocytes around it (HE, 400X)

small lymph nodes in the lower pretracheal chain, besides opacities with ground glass attenuation associated with fine reticular bands and traction bronchiectasis in the lower lobes basal segments, which would be related to fibrosis. Spirometry revealed light restrictive disorder and the ophthalmologic exam did not present alterations. In face of the cutaneous manifestations, the conduct adopted by the Dermatology Service was to orient the patient and observe the case, since the lesion did not present important esthetic/functional damage. However, due to the lung involvement, Pneumology optimized the treatment with prednisone 40 mg/day and azathioprine 50 mg/day, with gradual improvement of respiratory function.

DISCUSSION

Sarcoidosis is a non infectious multisystem granulomatous disease of unknown etiology. Genetic, immunologic, environmental and infectious factors seem to be related to its pathogenesis.¹ The first case of lupus pernio was described by Besnier, in 1889. Ten years later, the Norwegian dermatologist Boeck observed epithelioid granulomas histologically, naming the affection “multiple benign sarcoid of the skin”. In 1914, Schaumann reported systemic involvement of the disease. In honor of these authors, sarcoidosis is also called Besnier-Boeck-Schaumann disease.^{2,3}

The incidence of sarcoidosis is greater in developed countries. In Brazil, the estimated incidence is 10/100,000 inhabitants in 1985.^{4,5} Women are affected at the rate of 1.2:1 with predilection for the black race.⁶ Sarcoidosis affects young adults, preferably in the 25 to 40 year old age group, being rare in childhood. A second incidence peak is observed between 45 and 65 years of age.¹

Patients may be asymptomatic or have unspecific symptoms such as fever, emaciation, night sweat and fatigue. Other symptoms depend on the organs affected by the disease, as lung (dry cough, dyspnea, chest pain), eye (eye pain, vision disorders), skin, musculoskeletal system (joint pains, myalgia) and lymph node enlargement. Neurological, renal and cardiac symptoms are rare and, when they exist, they indicate severe disease.^{1,7}

Some specific clinical pictures are described, as the Löfgren syndrome, which consists of the association of fever, iritis, bilateral hilar adenomegaly and erythema nodosum, and is associated with a benign course of the illness, with spontaneous resolution in 90% of the cases. Other classical syndromes are the Heerfordt-Waldenström syndrome, that presents with fever, parotid gland enlargement, anterior uveitis and facial paralysis, and Mikulicz syndrome, where the parotid, submandibular, sublingual and lacrimal glands are involved. In childhood, the classical involvement was composed of arthritis, cutaneous lesions and uveitis.^{1,7}

The cutaneous disease occurs in 20-35% of the cases, enabling an early diagnosis due to the easiness in collecting a biopsy for the histopathological exam. Sarcoidosis may present innumerable forms of cutaneous manifestations: maculo-papulose, nodular, plaque, erythematous-brownish, single or multiple lesions. Classically, in the diascopy of these lesions the “apple jelly” color is observed. The presence of midface erythematous and infiltrated lesion characterizes lupus pernio, of difficult treatment and that may lead to disfigurement. Subcutaneous sarcoidosis lesions where epithelioid granulomas are observed in the panniculus adiposus are named Darier-Roussy nodules, and it

is suggested that this form of cutaneous sarcoidosis is related to systemic disease.^{1,7,8} Other less usual forms include ulcerated, ichthyosiform, psoriasiform, hypopigmented, verrucous, perforating, mutilating, rosaceaiform, sclerodermiform, mimicking lipodermatosclerosis, lichenoid and erythrodermic lesions and alopecia, cicatricial or not.^{1,7,9,10}

Infiltration of scars and tattoos by epithelioid granulomas may occur as the initial manifestation of sarcoidosis or associated with systemic disease.^{1,7,9,11}

The only skin lesion correlated with the prognosis is the erythema nodosum, that occurs in the acute phase and is associated with sarcoidosis of spontaneous resolution. The erythema nodosum is the unspecific manifestation of the disease, as the epithelioid granuloma cannot be observed histologically. Other unspecific manifestations are the erythema multiforme, pruritus, calcifications and unguis alterations associated or not to bone cysts.⁹

Histopathology revealed sarcoidal granuloma formed by concentric disposition of epithelioid cells. Sarcoidal granulomas may present a loose lymphocyte halo on its periphery, which caused them to be named "nude granulomas", in contrast with tuberculoid granulomas where a dense lymphocytic infiltrate may be observed around those structures. Caseating necrosis, characteristic of tuberculoid granulomas, is not observed in sarcoidal granulomas. Although they are not specific of sarcoidosis, asteroid corpuscles may be observed within giant cells (star-shaped collagen fibers) and Schaumann bodies (rounded, basophilic formations that seem to correspond to calcified lysosomes). The sarcoidosis diagnosis should only be made after special staining tests for mycobacteria and fungi, with their consequent negative demonstration, and absence of nervous filament impairment.^{12,13}

Besides the histopathological examination, the diagnosis of sarcoidosis is based on the compatible clinical and radiological picture (if the lungs are compromised). Differential diagnosis depends on the affected organs. In cases of cutaneous sarcoidosis, the important clinical and histopathological differential diagnosis are Hansen's disease, cutaneous tuberculosis, lupus vulgaris, deep mycoses, syphilis, foreign body granulomas and lymphocytic infiltrations.^{1,7}

CHART 1: Clinical-laboratorial approach of suspected sarcoidosis cases

1. Clinical history – fever, emaciation, cough
2. Clinical exam – lungs, skin, eyes, liver and heart
3. Biopsy of easily accessed sites
4. Chest radiograph and lung function test
5. Electrocardiogram
6. Ophthalmological evaluation
7. Biochemistry – liver and kidney evaluation / dosage of serum and urinary calcium

Chart 1 shows the clinical-laboratorial approach to patients with clinical suspicion of sarcoidosis.⁷

The dosage of angiotensin converting enzyme produced by sarcoidal granuloma presents 10% of false-positive and 40% of false-negative. Therefore, it does not represent a specific exam and does not signal disease activity nor prognosis.⁷ The propaedeutics may be necessary for in-depth study of systemic involvement. High-resolution computerized tomography is cited for lung sarcoidosis cases, magnetic resonance for neurological, muscular, visceral and lacrimal glands involvement, in addition to scintigraphy with gallium-67 for cardiac sarcoidosis.¹⁴

Sarcoidosis may have spontaneous resolution, making the doubt about when to treat the patient controversial. The option for the treatment should consider both the extent and severity of symptoms, as well as the possibility of disease progression with loss of function of affected organs. As for skin lesions, the chance of disfigurement is the treatment indication, since it makes quality of life improvement possible. Corticoids are considered the first treatment option. Topical corticoids, either occlusive or intralesional are the best choice in cutaneous sarcoidosis restricted to a few lesions. Systemic therapy with corticoid for cutaneous sarcoidosis is reserved for patients presenting a severe illness, disseminated or refractory to topical treatment.^{7,15}

Other drugs may be employed, such as methotrexate, antimalarial, azathioprine, chlorambucil, cyclophosphamide, cyclosporine, pentoxifylline and even infliximab with good response.^{1,7,15} □

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