SARCOIDOSIS VASCULITIS AND DIFFUSE LUNG DISEASES 2013; 30; 70-72

Verrucous sarcoidosis of the skin simulating squamous cell carcinoma

S. Pezzetta[1], H. Zarian[1], C. Agostini[2], R. Salmaso[3], M. Alaibac[1]
Unit of Dermatology[1], Immunology[2] and Pathology[3], University of Padua, Padua, Italy

Abstract. Here, we report a case of a 38-year-old woman with a history of systemic sarcoidosis who developed cutaneous verrucous sarcoidosis simulating a squamous cell carcinoma. This modality of presentation is unusual in both caucasic patients and in woman and may represent a diagnostic challenge for dermatologists. *(Sarcoidosis Vasc Diffuse Lung Dis 2013; 30: 70-72)*

Key words: skin sarcoidosis, squamous cell carcinoma, granulomatous disease

Introduction

Sarcoidosis is a systemic disease of unknown etiology characterized by the formation of non-caseating granulomas in several organs. Lungs, mediastinal and peripheral lymph nodes, liver, spleen, skin, eyes, and parotid glands may be involved; central nervous system, heart, upper respiratory tract, bones, and joints are less frequently but usually more seriously affected (1, 2).

Cutaneous manifestations of sarcoidosis occur in approximately 25% of patients and may indicate onset of the disease (3, 4). Sarcoidosis of the skin usually peaks between the ages of 25 and 35 years and a second peak occurs in women from 45 to 65 years old (5). Various skin lesions associated with sarcoidosis have been described (6, 7). Most authors divide these lesions into specific skin lesions, where histologic examination shows the typical sarcoid granulomas, and nonspecific skin lesions (6-8). Specific lesions are lupus pernio, infiltrated plaques, maculopapular eruptions, subcutaneous nodules and scars. The most important nonspecific skin lesion in sarcoidosis is erythema nodosum[7]. Many other clinical presentations of chronic cutaneous lesions have been reported, that's why cutaneous sarcoidosis is known as one of the "great imitators" in dermatology (9).

Here, we report a case of a 38-year-old woman with a history of sarcoidosis who had an unusual cutaneous presentation.

Case report

A 38-year-old woman presented with an asymptomatic nodular verrucous lesion on the forehead, surrounded by an erythematous halo, which had appeared during her second pregnancy (Fig. 1-2). The patient had been diagnosed systemic sarcoidosis two years before, when she had complained about respiratory and neurologic disorders and afterwards ematochemical examinations and instrumen-

Received: 21 February 2012
Accepted after Revision: 27 February 2012
Correspondence: Mauro Alaibac, MD PhD
Unit of Dermatology
University of Padua
Via Battisti 206
35128 Padova - Italy
Tel. +390498212901
E-mail: mauro.alaibac@unipd.it

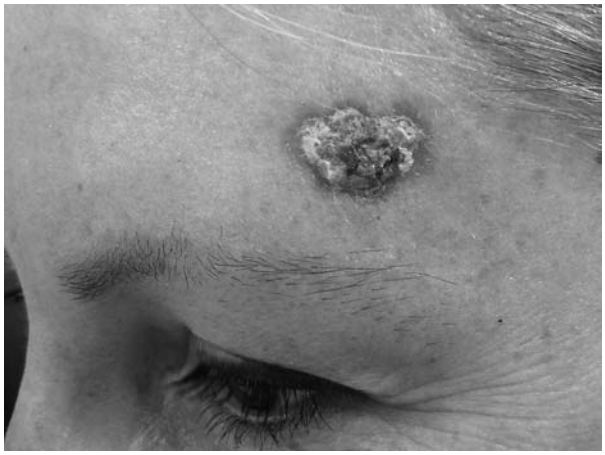

Fig. 1. Nodular verrucous lesion, surrounded by an erythematous halo, on the forehead of our patient

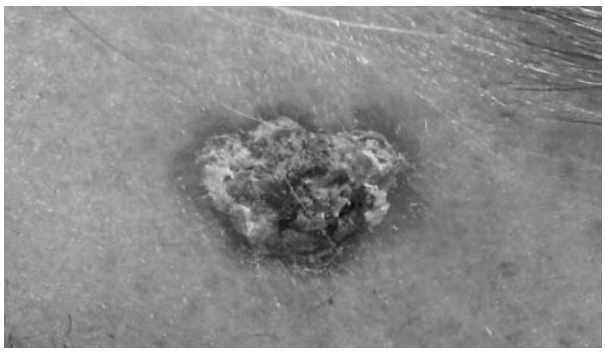

Fig. 2. Higher magnification of the nodular verrucous lesion

tal tests (chest TC, bronchoscopy, mediastinoscopy) had resulted positive. In the same year she had also been diagnosed cutaneous sarcoidosis after a biopsy from an erythematous patch appeared on her face during the first pregnancy. The biopsy obtained from the nodular lesion on the forehead was submitted for histological evaluation. This analysis revealed hyperkeratosis with parakeratosis of the corneum stratum and presence of dermal noncaseating granulomas consisting of epithelioid and giant cells surrounded by a lymphoplasmacytic infiltrate (Fig. 3). Stains and culture for acid-fast bacilli and fungi were negative. The clinical and histological characteristics were consistent with the diagnosis of verrucous sarcoidosis. The patient was treated with hydroxychloroquine and low doses of oral steroid with an adequate response.

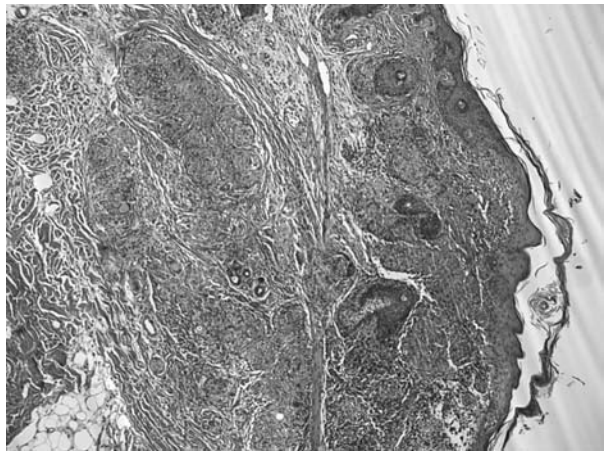

Fig. 3. Epidermal hyperkeratosis and parakeratosis and noncaseating granulomas in the dermis consisting of epithelioid and giant cells surrounded by a lymphoplasmacytic infiltrate

Discussion

Cutaneous sarcoidosis is known as one of the "great imitators" in dermatology, because lesions may assume a vast array of morphologies (9). Some uncommon presentations include morpheaform plaques (10), lower extremity swelling (11), lichen niditus-like papules (12), gyrate erythema (13), verrucous lesions (6), genital lesions (14, 15), palmar erythema (16), discoid lupus–like plaques (17), lesions mimicking polymorphous light eruption (6), plaques resembling lichen sclerosus (18) and pustular lesions. Therefore cutaneous sarcoidosis frequently represents a diagnostic challenge for physicians, which often results in a diagnosis of exclusion, established by the histological findings of noncaseating granulomas and after eliminating other pathological causes of skin lesions such as fungus, mycobacteria, and polarizable foreign bodies (19). Verrucous sarcoidosis is a rare specific cutaneous lesion. Our case is unusual because verrucous lesions in sarcoidosis are uncommon (20-26). Moreover, our case occured in a Caucasian woman whereas all the cases described in literature were generally observed in male black patients and only one case was observed in a black female patient (20). Most patients had a systemic involvement principally of the respiratory system, as observed in our case.

In conclusion, we describe a case of cutaneous verrucous sarcoidosis simulating a squamous cell carcinoma. This modality of presentation is unusual in

both caucasic patients and in woman and may represent a diagnostic challenge for dermatologists.

References

1. Giuffrida TI, Kerdel FA. Sarcoidosis. Dermatol Clin 2002; 20: 435-47.
2. Iannuzzi MC, Rybicki BA, Teirstein AS. Sarcoidosis. N Engl J Med 2007; 357: 2153-2108.
3. Fernandez-Faith E, McDonnel J. Cutaneous sarcoidosis: differential diagnosis. Clin Dermatol 2007; 25: 276-87.
4. Garrido-Ruiz MC, Enguita-Valls AB, de Arriba MG, et al. Lichenoid sarcoidosis: a case with clinical and histopathological lichenoid features. Am J Dermatopathol 2008; 30: 271-3.
5. English JC III, Patel PJ, Greer KE. Sarcoidosis. J Am Acad Dermatol 2001; 44: 725-43.
6. Elgart ML. Cutaneous sarcoidosis: definitions and types of lesions. Clin Dermatol 1986; 4: 35-45.
7. Mana J, Marcoval J, Graells J, Salazar A, Peyri J, Pujol R. Cutaneous involvement in sarcoidosis: relationship to systemic disease. Arch Dermatol 1997; 133: 882-8.
8. Sharma OP. Cutaneous sarcoidosis: clinical features and management. Chest 1972; 61: 320-5.
9. Katta R. Cutaneous sarcoidosis: a dermatologic masquerader. Am Fam Physician 2002; 65: 1581-4.
10. Burov EA, Kantor GR, Isaac M. Morpheaform sarcoidosis: report of three cases. J Am Acad Dermatol 1998; 39: 345-8.
11. Ramanan AV, Denning DW, Baildam EM. Cutaneous childhood sarcoidosis - a rare disease refractory to treatment. Rheumatology 2003; 42: 1570-1.
12. Okamoto H, Horio T, Izumi T. Micropapular sarcoidosis simulating lichen nitidus. Dermatologica 1985; 170: 253-5.
13. Altomare GF, Capella GL, Frigerio E. Sarcoidosis presenting as erythema annulare centrifugum. Clin Exp Dermatol 1995; 20: 502-3.
14. McLaughlin SS, Linquist AM, Burnett JW. Cutaneous sarcoidosis of the scrotum: a rare manifestation of systemic disease. Acta Derm Venereol 2002; 82: 216-7.
15. Klein PA, Appel J, Callen JP. Sarcoidosis of the vulva: a rare cutaneous manifestation. J Am Acad Dermatol 1998; 39: 281-3.
16. Cliff S, Hart Y, Knowles G, et al. Sarcoidosis presenting as palmar erythema. Clin Exp Dermatol 1998; 23:123-4.
17. Harman KE, Calonje E, Robson A, et al. Clinicopathological cases. Case 1. Clin Exp Dermatol 2003; 28: 565-6.
18. Levine EG, Osztreicher P, Heymann WR. Sarcoidosis mimicking lichen sclerosus. Int J Dermatol 2005; 44: 238-9.
19. Walsh NMG, Hanly JG, Tremaine R, et al. Cutaneous sarcoidosis and foreign bodies. Am J Dermatopathol 1993; 15: 203–207.
20. Irgang S. Sarcoidosis in the Negro. Cutis 1969; 5: 826.
21. Schmunes E, Lantis LR, Hurley HI. Verrucose ulcerative skin lesions in sarcoidosis: an unusual clinical presentation. Arch Dermatol 1970; 102: 665-9.
22. Herzlinger DC, Marland AM, Barr RJ. Verrucous ulcerative skin lesions in sarcoidosis: an unusual clinical presentation. Cutis 1977; 23: 569-72.
23. Glass LA, Apisarnthanarax P. Verrucous sarcoidosis simulating hypertrophic lichen planus. Int J Dermatol 1989; 28: 539-47.
24. Smith HR, Black MM. Verrucous cutaneous sarcoidosis. Clin Exp Dermatol 2000; 25: 98-9.
25. Corradin MT, Forcione M, Fiorentino R, Bordignon M, Alaibac M, Belloni Fortina. A Cutaneous sarcoidosis in an adolescent with dark skin. Eur J Dermatol 2010; 20: 659-60.
26. Irgang S. Verrucous and papillomatous types of sarcoid: Report of a case. Arch Dermatol Syphilol 1950; 62: 105–8.