Case Report

Sarcoidosis, alopecia and disseminated annular itching plaques: About a case

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Abstract

The diversity of cutaneous manifestations of sarcoidosis can be the source of various diagnostic errors. We report a case of cutaneous sarcoidosis in a 64 years old patient who presented with scattered pigmented and itchy annular lesions with raised and sometimes infiltrated borders, with the tendency of central healing. Histopathologic examination confirmed the diagnosis of cutaneous sarcoidosis. This unusual presentation of cutaneous sarcoidosis can be confounded with many skin conditions. Therefore, only a biopsy can easily confirm the diagnosis of these rare forms of cutaneous sarcoidosis.

Keywords: Alopecia, Itching plaques, sarcoidosis, Senegal

INTRODUCTION

Sarcoidosis, more frequent in American black, regardless their origin (Descamps et al., 2005), but it is less reported in African black (Niang et al., 2007). The diversity of cutaneous manifestations (Jacyk, 1999) can lead to diagnostic error and confusion with other diseases such as leprosy and skin tuberculosis. Delay in diagnosis can be life-threatening because of the risk of visceral involvement (Niang et al., 2007; Mosam and Marar, 2004). We report a particular case of cutaneous sarcoidosis viewing the extent and the itchy nature of the lesions and the presence of alopecia.

Observation

A 64 year’s old man with no significant past medical history was consulted for progressively worsening itchy lesions since 20 years ago. The patient had used unknown oral and local herbal medicine.

Physical examination showed a good general health and annular scaly pigmented patches with raised and sometimes infiltrated borders, with a central healing tendency (Figure 1 and 2) on the limbs and trunk but sparing the face. We noted a bilateral non fissured palmar-plantar keratoderma. On the scalp, annular alopecic plaques with an infiltrated rim (figure 3). Different diagnostic hypotheses were: borderline tuberculoid leprosy, mycosis fungoides, the annular lichen and skin sarcoidosis.

Ophthalmological and neurologic examination was unremarkable. Histopathologic findings, with well circumscribed granulomas containing epithelioid and giant cell surrounded by a ring of lymphocytes without caseous necrosis localized in dermis (Figure 3) were in favor of sarcoidosis.

The tuberculin test was negative. CBC was normal. C-reactive protein was negative and the first hour, ESR was 30 mm. Mycological and HIV serological test were negative.

Serum calcium was 76.20 mg / l (76.00 to 110.00), urinary calcium was 105.5 mg/24 h (100-300) and angiotensin converting enzyme blood levels was 45 IU / l (155UI-35 / l). Electrocardiogram, thoracic CT scan and abdominal ultrasound were normal.

The patient was put under hydroxychloroquine and prednisone combined with a topical corticosteroid class IV. Despite this treatment, no improvement was notice after 6 months. The patient was lost to follow for 7
Figure 1. Annular squamous and pigmented plaques on lower limbs

Figure 2. Annular squamous and pigmented plaques on lower limbs

Figure 3. A plaque of alopecia
months, when he came back again; he was put on methotrexate 15 mg per week. After two months of treatment, there was no improvement, and he was lost once again.

DISCUSSION

We report a case of cutaneous sarcoidosis, which is particular because of the extent of the lesions, and their itching and hair losing character. Given the clinical presentation, borderline tuberculoid leprosy, mycosis fungoides and the annular lichen were also mentioned as differential diagnosis. They had been ruled out by the absence of their particular histopathologic evidences. Although cutaneous sarcoidosis is less frequent and is more severe in black skin but our patient did not present any visceral involvement (Mosam and Marar, 2004; Kong et al., 2011). The 67 Gallium scintigraphy was not performed but the absence of ophthalmologic abnormalities, inflammatory markers elevation (Jamesw et al., 2006), electrocardiographic abnormalities and CT argue strongly in favor of isolated cutaneous sarcoidosis. Pruritus is relatively rare in sarcoidosis and only seen 10-15% of cases (Morrison, 1976). In Senegal, a series of 30 cases in 37 years was reported by (Niang et al., 2007), but no cases had pruritus. Phytotherapy could partly explain pruritus, but its persistence after stopping facilitates our diagnosis. The high range of skin lesions described in African Americans and South Africans’ blacks (Mosam and Marar, 2004), as well as in our patient could be explained by the long course of disease. Regarding palmoplantar keratoderma, to our knowledge, it is described only in erythrodermic sarcoidosis (Katta et al., 2000). As to the non-scarring diffuse alopecia, it is rarely reported. In a review by Katta et al. (2000) up to 2000 year, 28 cases of alopecia in sarcoidosis patient were reported. The patients were all of so called black skin, and among 23 cases whose gender was known, 21 were women.

Moreover, non improvement of the lesions after six months of oral corticosteroids alone or with hydroxychloroquine seems to be due to the usual resistance of sarcoidosis’ skin lesion to the current therapeutic measures (Kong et al., 2011; Granulomes cutanes non infectieuses, Dermatologie et maladies sexuellement transmissibles, 2004; Grossans et al., 2002). Methotrexate weekly low dose 10 to 15 mg was the most used treatment as a second choice (Londner et al., 2011). However for our patient the duration of the treatment is very short to draw a conclusion.

CONCLUSION

The diversity of cutaneous manifestation of sarcoidosis, especially in black skin, is usually a problem of differential diagnosis with cutaneous mycobacteriosis. A skin biopsy will be always a help making the right diagnosis.

REFERENCES