

An Unusual presentation of Cutaneous Sarcoidosis in a Nigerian: A case report

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Abstract

Background: Sarcoidosis is an idiopathic disorder which present with different manifestation. This is an unusual case of cutaneous sarcoidosis with extensive polymorphic lesions on the skin as the only organ involved.

Case Report: Mrs. A.O, a 28 year old house-wife presented with a one year history of progressive itchy, reddish, raised skin rashes for one year. Lesions were initially localized to the chest and limbs but subsequently involved the whole body including the palms and soles. No history of fever or weight loss. On examination, she had generalized erythematous, annular and arcuate plaques with areas of active edges involving the whole body including the palms and soles. Healed lesions were atrophic and hyperpigmented (Figure 1). No mucosal involvement. Her chest radiograph, FBC, ESR, LFT, serum Calcium, ACE levels (20U/L) and ECG were normal, while her Mantoux and Gene expert test was negative. Biopsy of the lesion showed dermal infiltrates, composed of epithelioid histocytes disposed in nodules as well as multinucleated giant cells of langhans and foreign body types features consistent with cutaneous annular sarcoidosis (Figure 3 and 4). She was placed on systemic steroids followed by topical steroids and made significant improvement. (figure 2)

Conclusion: Sarcoidosis is not common in our environment and cutaneous manifestation as the sole presentation is even rarer. We report one such case with skin as the sole organ affected and equally of interest is the extensive nature of the lesions observed.

Présentation inhabituelle de la sarcoïdose cutanée chez un Nigérian : à propos d'un cas

Résumé

Contexte de l'étude : La sarcoïdose est un trouble idiopathique qui se présente sous différentes manifestations. Il s'agit d'un cas inhabituel de sarcoïdose cutanée avec des lésions polymorphes étendues sur la peau comme seul organe atteint.

Rapport de cas : Mme A.O, une femme au foyer de 28 ans, présente depuis un an des éruptions cutanées progressives avec démangeaisons, rougeâtres et surélevées depuis un an. Les lésions étaient initialement localisées au thorax et aux membres, mais ont ensuite touché tout le corps, y compris les paumes et les plantes. Aucun antécédent de fièvre ni de perte de poids. À l'examen, elle présentait des plaques érythémateuses généralisées, annulaires et arquées avec des zones de bords actifs touchant tout le corps, y compris les paumes et les plantes. Les lésions cicatrisées étaient atrophiques et hyperpigmentées (Figure 1). Aucune atteinte muqueuse.

Sa radiographie thoracique, FBC, ESR, LFT, ses taux sériques de calcium, d'ACE (20U/L) et son ECG étaient normaux, tandis que ses tests experts de Mantoux et Gene étaient négatifs.

La biopsie de la lésion a montré des infiltrats dermiques, composés d'histocytes épithélioïdes disposés en nodules ainsi que de cellules géantes multinucléées de langhans et de corps étrangers présentant des caractéristiques compatibles avec une sarcoïdose annulaire cutanée (Figures 3 et 4).

Elle a été placée sous stéroïdes systémiques suivis de stéroïdes topiques et a constaté une amélioration significative. (Figure 2)

Conclusion : La sarcoïdose n'est pas fréquente dans notre environnement et sa manifestation cutanée car la présentation unique est encore plus rare. Nous rapportons un de ces cas, la peau étant le seul organe touché, et le caractère étendu des lésions observées est tout aussi intéressante.

Mots-clés : Sarcoïdose cutanée, lésions polymorphes étendues, atrophie

INTRODUCTION

Sarcoidosis is a multisystemic disorder with variable presentation involving the lungs, lymph nodes, eyes and skin. It is more common in the age group of 40-50 years and has a female preponderance (1,2,3,4,5) Epidemiologically, it has a dual peaked presentation with age group of 25-35 and 45-55 years being commonly affected. People of African-American descent and Scandinavians are also frequently affected. (6,7,8)

DISCUSSION

Skin lesions occur in about a third of cases, predominantly on the face and limbs (9,10,11) presenting as plaques, nodules, papules and infiltrated scars (9,10,11,12). Furthermore, cutaneous sarcoidosis could rarely occur without systemic disease (11,12,13,14). However our patient neither had infiltrative scar lesions or systemic affection. She was placed on systemic steroids followed by topical steroids and made significant improvement (figure 3) and has been on regular follow up at the clinic without evidence of progression of cutaneous or systemic disease.

A case of extensive polymorphic cutaneous lesion of sarcoidosis is hereby reported. The patient presented with a plaque form of sarcoidosis. These lesions are usually diffuse annular plaques with central clearing involving the limbs, shoulders, buttocks and thigh although more than one form of lesion may occur in a single patient. (15). Similar presentation has been described in black South Africans where they have generalized skin involvement with different forms of presentation. (10). Histologic evaluation of sarcoidal plaques shows the presence of noncaseating granulomas throughout the entire dermis.(15)

However, a 10 year retrospective review of 43 patients with sarcoidosis in Lagos, revealed that out of the 43 patients with sarcoidosis, 30% had skin lesions and the most common skin presentation were sarcoidal infiltration of scarification marks(9).

It is noteworthy that our patient did not have other systemic involvement at the time of presentation and even up to two years on follow-up. Cutaneous lesions are common in blacks and have been described as profuse and generalized (11,12). The lungs are said to be affected in most cases(9) although about a quarter of patients have cutaneous manifestation as the initial presenting symptom.(9,11,12). Most sarcoidal lesions are not itchy or painful but in one-tenth of cases it

may be pruritic (5) as seen in this our patient. The most important single criterion for the diagnosis of sarcoidosis is the finding of typical granulomas histologically (15) these were seen in the histology of the lesion taken.

Treatment depends on extent of lesions. In pulmonary and cutaneous involvements steroids, hydroxychloroquine or methotrexate may be employed. The patient was given systemic steroids due to the extensive cutaneous involvement and she made significant progress.

CONCLUSION

Sarcoidosis in blacks has variable presentation and diagnosis must be considered in atypical presentation or extensive skin involvement like this especially if the skin is the sole organ involved at the time of presentation.

Conflict of interest: No conflict of interest

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Figure 1- Erythematous, annular and arcuate plaques with areas of active edges. Healed lesions are atrophic and hyperpigmented.



Figure 2 – Two weeks after steroid treatment.

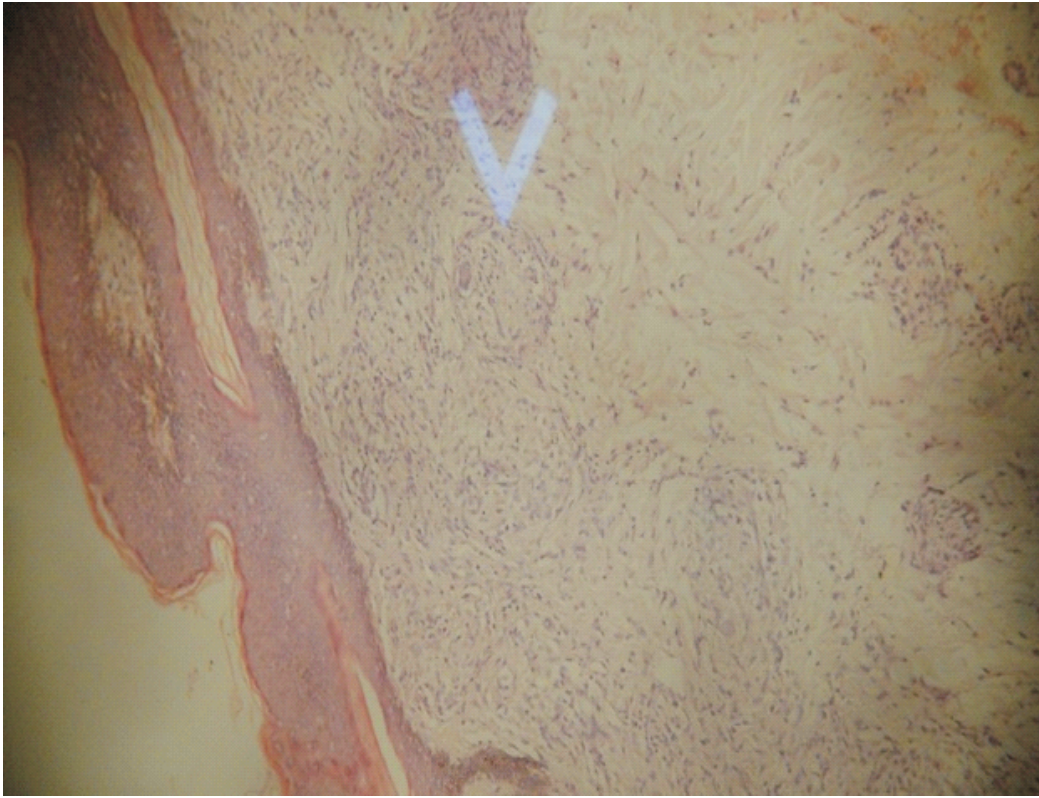


Figure 3- Section shows - Dermal infiltrate composed of epithelioid histiocytes disposed in nodules (see arrow).

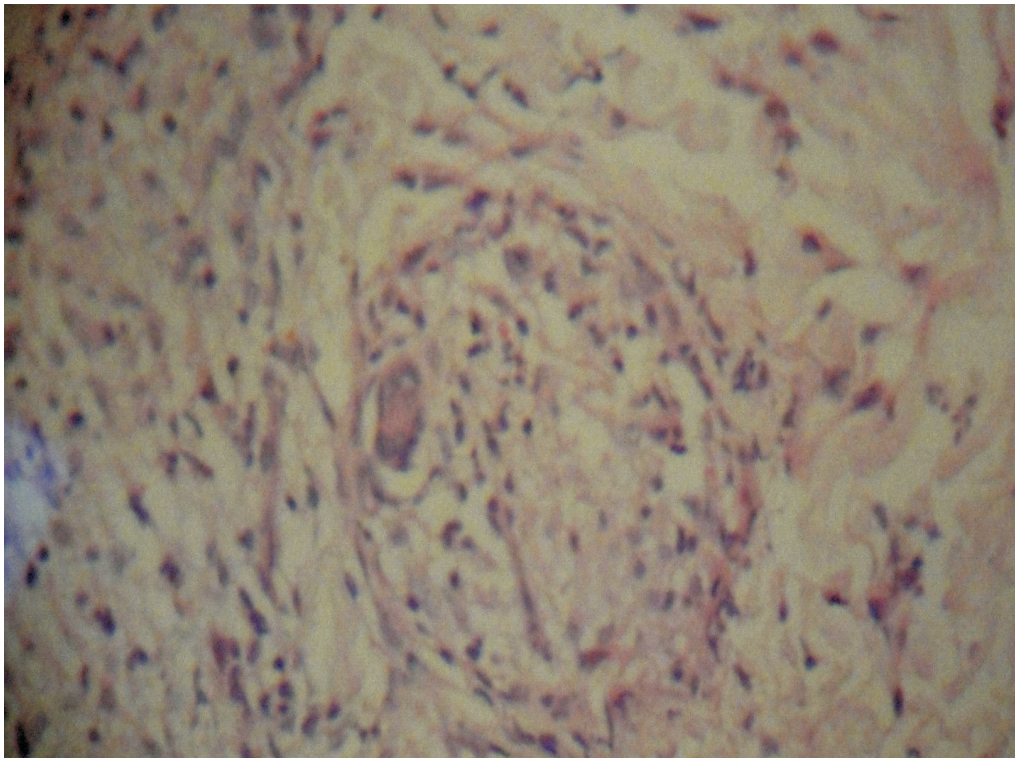


Figure 4 – showing a sarcoidal non caseating nodule at x 100 magnification

Consent to Clinical Photography

I am a skin doctor and staff of the department of Medicine of the Kaduna State University Teaching/BarauDikko Teaching Hospital.

Your consent is being sought before this can be done.

I also seek your permission to take pictures and this may be used for teaching and publication purposes. Where possible, I will not show anything that will identify you.

I can be reached at the skin clinic, Department of Medicine BDTH for any enquiries regarding this study or by phone on 08036784444. Email: diza1ng@yahoo.com

Name of Doctor: Dr. Sani Signature: [Signature]

Date: 3/6/2022

Patient statement (please circle your answer)

I agree to have clinical photographs The request for the same has been explained to me and I fully understand what it entails.

I consent to clinical photographs being taken for my personal health record only. Yes ~~No~~

I consent to clinical photographs being available for teaching in the health care context. Yes ~~No~~

I consent to my clinical photographs being published for the specific purpose of publication in Medical or Scientific Journal or Textbook at any time in the future. (* please delete as appropriate). Yes ~~No~~

Signature of patient: [Signature] Date: 3/6/2022

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