Case Report: Nummular dermatitis mimicking extensive Tinea corporis or Sulzberger-Garbe dermatosis in an HIV patient

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ABSTRACT

Annular lesions in dermatology vary and include tinea corporis, discoid lupus, granuloma annulare, psoriasis, nummular dermatitis and Sulzberger-Garbe dermatosis. These lesions are mostly multiple, scaly and "coin-shaped" differing from each other based on other clinical features and laboratory investigations. We present a case of large annular patches in a 40 year old male whose lesions demonstrated changing features with clinic attendance. He was initially assessed to have tinea corporis but subsequent clinic attendance and laboratory investigations led to a diagnosis of nummular dermatitis and a consideration of Sulzberger-Garbe dermatosis.

INTRODUCTION

Nummular dermatitis is one of the variants of atopic dermatitis.[1,2] Nummular dermatitis (ND) occurs in all age groups especially in those in their forties and has a negative impact on quality of life due to the associated intense pruritus.[1,3] Prevalence studies show ND to be rare, forming 0.1% of dermatological consultations and to have conflicting gender prevalence being found more in females in some and found more in males in other studies.[2-4]

Clinically, nummular dermatitis appear as multiple pruritic "coin-shaped" or annular scaly patches.[5-7] These patches typically measure less than 5cm.[3,8] Other lesions which present as annular lesions are; tinea corporis, cutaneous lupus erythematosus, granuloma annulare, psoriasis and Sulzberger-Garbe dermatosis.[5,9-14] Tinea corporis especially if extensive appears as large scaly patches with central clearing and papules around the edges.[15] Tinea corporis and nummular dermatitis can sometimes be clinically indistinguishable and the size of the patches become a distinguishing factor with large patches favouring a diagnosis of tinea corporis especially as reports of large patches of ND are few.[8,12,15]

Sulzberger-Garbe dermatosis.is a rare dermatosis first described in 1978 and said to be of doubtful significance as a disease entity.[11,16] Sulzberger-Garbe dermatosis (S-GD) is characterized by well-defined discoid plaques with eczematization and lichenification.[11,16] Sulzberger-Garbe dermatosis is mostly a retrospective diagnosis based on a patient presenting with changing lesions at each consultation and the lesions not having all the typical features to make a specific diagnosis but lesions consistently vacillate between eczematous and lichenoid.[11,16]

CASE REPORT

An adult male aged 41 years, a printer was attended to at our out-patient clinic. He gave a history of pruritic rashes of two years duration (2 years). Rashes started on the legs, later involving the trunk and upper limbs. There was no family nor personal history of atopy. He had no history suggestive of contact dermatitis and no history of use of topical steroids.

Clinical examination revealed, a young male with extensive, large symmetrical scaly, annular, lichenified, hyperpigmented patches with raised edges around the armpits, neck, flexural surface of the upper limbs, extensor surface of the lower limbs and the trunk. The lesions were not weepy. The patient admitted to the use of both topical and oral herbal concoctions with no improvement in lesions. He was clinically evaluated as having extensive tinea corporis (suspicion of alteration of lesions by the

herbs used) with a differential of atopic dermatitis, figures 1 A and B. The patient was told to stop the use of self-prescribed herbal concoctions and empirically treated with Itraconazole tablets 200mg daily for 2 weeks and ketoconazole shampoo for 6 weeks. Routine VDRL, stool ova and parasite were negative. Full blood count report and fasting blood sugar were normal but retroviral screening was positive.

At follow up after 6 weeks, there was no change in the patient's lesions. A diagnosis of nummular dermatitis was entertained. Skin scrapping for mycology, patch test and a skin biopsy were done 8 weeks after last drug intake to allow for "drug was out". On the day of skin biopsy (8 weeks after medications), the lesions were noted to be eczematous making nummular dermatitis a major consideration. The requested patch test was not done for financial reasons.

Skin biopsy report was consistent with a chronic spongiotic dermatitis; hyperkeratosis, focal area of parakeratosis, acanthosis, multifocal areas of Langerhans cell abscesses with minimal epidermal spongiosis, superficial dermal perivascular lymphohistiocytic infiltrates. Periodic acid-Schiff staining done for fungi was negative.

Patient also had a negative skin scrape mycology study. He was commenced on a moisturizer (shea butter), betamethasone cream, oral vitamins E and C. He was referred to haematology for commencement of antiretrovirals.

Nummular dermatitis is regarded as a variant of atopic dermatitis and accounts for 0.1% of dermatologic diseases.[4,17,18] Nummular dermatitis (ND) is a chronic relapsing dermatitis characterized by multiple pruritic well circumscribed "coin-shaped" rashes located mostly on the extremities and the trunk although in a few patients, the face and neck can be affected.[3,5-7] In our patient, there was involvement of the trunk, neck and extremities.

Whilst gender based prevalence vary, Patruno et al report more occurrence in males.[1] Nummular dermatitis despite affecting all age groups, occurs mostly in those in their forties.[1,3] Our patient is male and in his forties. Typically ND lesions measure 1-5cm in diameter but Lesions measuring more than

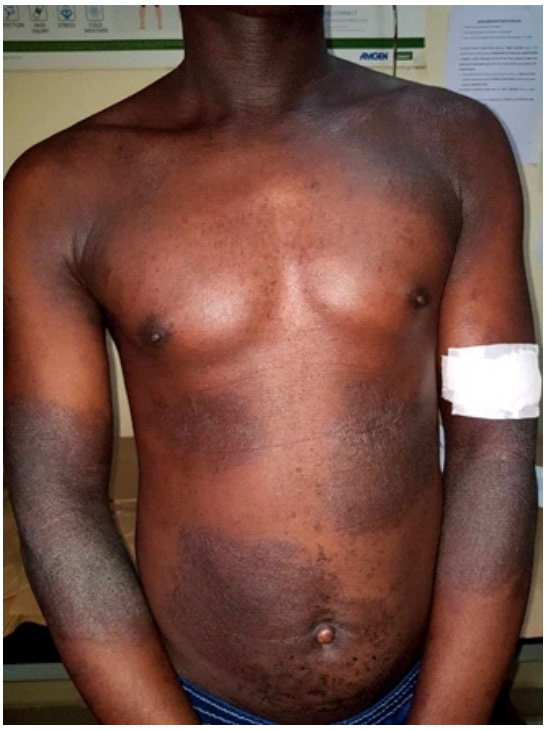

Fig. 1A Nummular dermatitis: widespread Scaly patches

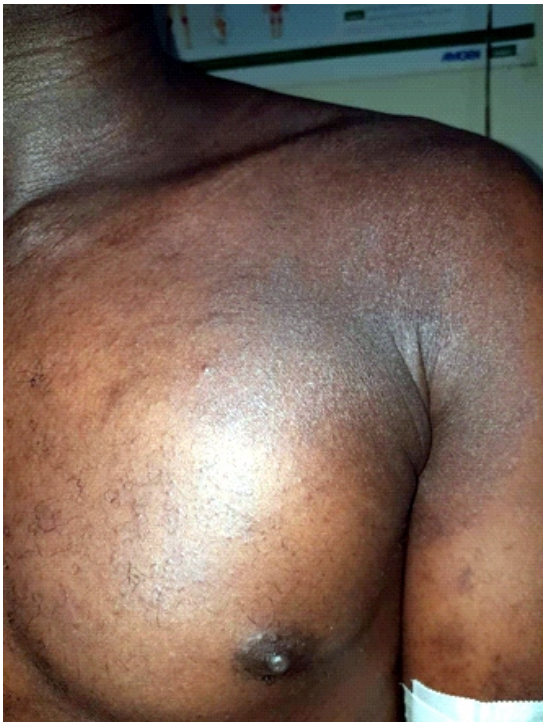

Fig. 1B Nummular dermatitis: Scaly patches; armpit and neck

10 cm in diameter like in our patient have been reported.[8] Tinea corporis with a clinical prevalence of 1.1% due to its annular, scaly configuration is usually a close clinical differential of nummular dermatitis especially when lesions are extensive as

was the case in this patient.[4,15] Clinically, tinea corporis is characterized by well demarcated, annular, scaly, pruritic patches, central clearing and an advancing border unlike atopic dermatitis which tends to be diffuse. Additionally, the patches of Tinea corporis are large and not weepy as in the initial presentation of this patient. Tinea corporis can be quite extensive in immunocompromised individuals or in individuals who have applied corticosteroids extensively on the skin.[15] Our patient had the retroviral disease which we thought was responsible for how extensive the patches were. However, the investigations and antifungal treatment did not support are initial clinical diagnosis. Retroviral disease is documented to lead to bizarre and extensive presentation of skin lesions.[15]

The cause of ND is unknown but a personal or family history of atopy, contact dermatitis, dry skin, stasis dermatitis, smoking and alcohol have been reported to exacerbate or predispose individuals to ND.[3,5] The histopathological features of ND are those of an acute or subacute dermatitis; spongiosis, spongiotic vesicles, acanthosis and a superficial dermal perivascular inflammatory infiltrates.[8] Hyperkeratosis and acanthosis with mild spongiosis characterise the chronic stage.[8] Our patient had no history of atopy and no history suggestive of a contact dermatitis although the requested patch test was not done. The patient's biopsy report was that of a chronic spongiotic dermatitis in keeping with findings in nummular dermatitis. The patient was treated with steroid creams. In the management guidelines for the treatment of atopic dermatitis, high potency steroids like what was used in this patient is recommended.[19]

Other coin shaped lesions which can be mistaken for ND include; contact dermatitis, psoriasis, cutaneous lupus erythematosus, Sulzberger-Garbe dermatosis.[5,9-11,13]

Sulzberger-Garbe dermatosis (S-GD) is characterized by well-defined discoid plaques with eczematization and lichenification.[11,16] Histologically, (S-GD) is characterized by spongiosis, perivascular infiltrates composed of lymphocytes, leukocytes, eosinophils, and plasma cells.[11,16] Also, eosinophilia is reported in most patients. Lesions of S-GD commonly, are diagnosed as nummular dermatis, contact dermatitis, lichen planus and mycosis fungoides before a diagnosis of S-GD is made.[11,16] Sulzberger-Garbe dermatosis is mostly a retrospective diagnosis based on a patient presenting with changing lesions at each consultation and the lesions not having all the typical features of any rash but consistently vacillate between eczematous and lichenoid.[11,16] Sulzberger-Garbe dermatosis (S-GD) occurs mostly in middle-aged males, on the extremities and trunk and there may be eosinophilia.[16] Our patient is male, lesions were on his extremities and trunk, his lesions changed between his consultations from lichenoid to eczematous making a consideration of Sulzberger-Garbe dermatosis a consideration although he had no eosinophilia.

CONCLUSION

We have presented this case to highlight the importance of skin biopsy in the management of lesions which clinically mimic one another and to stimulate interest in rare diagnostic entities. Also, retroviral disease can result in bizarre or extensive presentation of skin lesions. A close collaboration between Dermatologists and Dermatopathologists to enhance patient management is suggested.

CONFLICT OF INTEREST: None.

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