

Anetoderma secondary to borderline leprosy

Anetoderma secundária à hanseníase dimorfa

Anetoderma secundaria a hanseniasis dimorfa

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ABSTRACT

OBJECTIVE: To report a case of secondary anetoderma in a patient with borderline leprosy and thus draw attention to this unusual association of anetoderma and hanseniasis. **CASE REPORT:** A mixed-race man who was 21 years old was referred to the Ambulatory of Dermatology of Universidade do Estado do Pará, in the City of Belém, Pará State, Brazil, with a diagnosis of borderline leprosy at 10 years old. Years later, the patient developed "scrolling" surface scars, with a diagnosis compatible with anetoderma lesions secondary to Hansen's disease. **FINAL CONSIDERATIONS:** A dermatological affection, although rare, may be associated with common systemic diseases, such as leprosy, and the disclosure of such affections is emphasized in this case. Their investigation and exclusion are necessary when faced with such conditions.

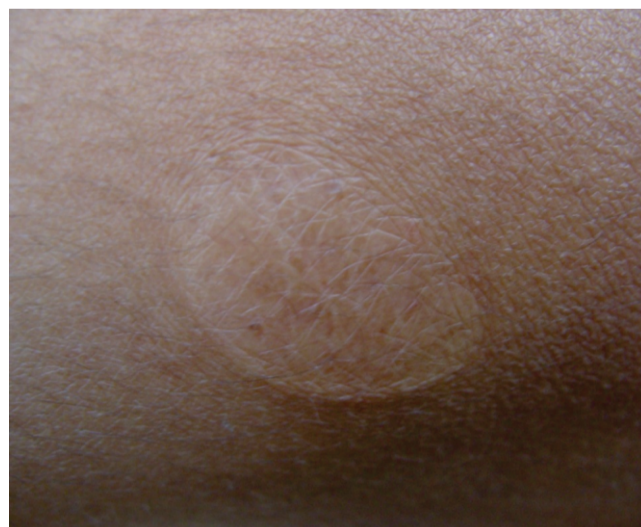
Keywords: Anetoderma; Leprosy; Skin Diseases, Bacterial; Elastic Tissue.

INTRODUCTION

Anetodermas (from the Greek: *anetos* = flat; *derma* = skin) were described in 1882 by Jadassohn, who used the word to describe the clinical-pathological feature of a new disease in a patient with erythematous maculae that had evolved into scars^{1,2,3}. They have an unknown etiology⁴, but possible causes include auto-immune mechanisms⁵ (lupus and scleroderma), genetics causes⁶ (familial forms), infectious processes¹ (chronic atrophying acrodermatitis associated with borreliosis, hanseniasis, syphilis, varicella, and tuberculosis), defects in the synthesis of elastic fibers⁷ (penicillamine inhibiting lysiloxydase) and elastophagocytosis⁴. We report the case of a patient who presented anetoderma lesions secondary to borderline leprosy (BL), an association that is considered rare.

CASE REPORT

A male, 21 years old, originally from Belém, Pará State, Brazil, presented atrophic and circular lesions for two years distributed along the trunk and arms, with "scrolling" surface scars that varied in size from 3 to 4 cm. The lesions were asymptomatic and had been growing in number and size (Figures 1 and 2).



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Figure 1 – Oval atrophic scars of a patient with anetoderma secondary to borderline hanseniasis

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Figure 2 – Details of lesions of a patient with anetoderma secondary to borderline hanseniasis

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Skin smears were performed for the lesions and were negative for acid-fast bacilli. A biopsy and histopathological exam revealed epidermis with intergemmal crests and dermis presenting a discreet lymphocytic infiltrate around the bases of the superior segment and compact hyaline of the conjunctiva at the inferior segment aspect. Verhoeff staining showed the absence of elastic fibers in all superior dermis, which was compatible with anetoderma.

VDRL and serologies for HIV, rubella and hepatitis were all negative. Anti-nuclear factor (AFN) and anti-native DNA antibodies were not reactive.

The patient also reported that at 10 years old, he was diagnosed with borderline leprosy and had received 24 doses of multi-bacillary multidrug therapy (MDT/WHO); he was discharged as cured. However, he denied a personal history of tuberculosis, chickenpox or other infectious diseases.

DISCUSSION

Anetodermas, also known as macular atrophies, are characterized by atrophic lesions, which are generally oval or circular, due to the destruction of the elastic dermal tissue. They may be classified into three groups: hereditary, primary and secondary⁸.

They affect men and women equally, and the average age of appearance is 20 years. Clinically, they vary from 1 cm to more than 10 cm, and their number varies from a few to

hundreds. They are recognized as areas of flat tissue covered with thin, hypochromic and herniated skin that may be protruded due to their flatness⁸. They are located in the trunk, arms, and nape and are able to affect the face. Their etiology is unknown, but they are associated with an increase in elastolysis. Moreover, they have a chronic evolution and a high resistance to treatment^{2,9}.

Anetodermas may be classified as idiopathic Schwenninger-Buzzi anetoderma, idiopathic Jadassohn anetoderma, Pellizari anetoderma, hereditary macular atrophy, which evolves into anetoderma scars with brilliant hypochromic and superficial atrophy⁶, and secondary anetoderma, which is more frequent².

Secondary anetoderma occurs in patients with anterior cutaneous inflammatory processes, such as lupus, syphilis, Hansen's disease, tuberculosis, varicella, and borreliosis². In this case, the lesions do not necessarily appear at the same place as the cutaneous manifestation of the associated disease.

The diagnosis is essentially clinical and based on anamnesis. It is confirmed by a histopathological exam revealing superficial and profound lymphocytic or vascular infiltrate, with a predominance of lymphocytes. Epidermal alterations are not observed, not even in the subcutaneous cellular tissue⁷. Granulomas may be found in giant cells in the dermis^{7,10}. Diagnostic confirmation requires special staining methods to identify the elastic fibers (orcein, Verhoeff-Van Gieson), elastolysis and elastorrhexis, which affect the papillar and reticular dermis. The remaining fibers are fragmented, adopting a characteristic tortuous and thin aspect⁷.

Achenbach et al⁹ described a case of anetoderma secondary to polar tuberculoid hanseniasis, and they observed a hypochromic area of 7x5 cm located on the anterior face of the left arm that was protruded, with a hernia and thin skin, which corresponded to the first plaque of polar tuberculoid hanseniasis. When this plaque became involuted after receiving proper treatment, the lesion became anetodermic.

Therefore, despite the rarity of this association, the present case illustrates the aspects of this affection, highlighting the importance of further studies to determine the exact correlations between cytokines and antigens in such associations.

FINAL CONSIDERATIONS

This case emphasizes the clinical presentation of a rare dermatological condition and the importance of its recognition and research to exclude the diagnosis of systemic diseases that are sometimes associated.



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RESUMO

OBJETIVO: Relatar um caso de anetoderma secundária em um paciente com hanseníase dimorfa e, consequentemente, chamar atenção para esta associação incomum entre anetoderma e hanseníase. **RELATO DE CASO:** Um homem de cor parda, com 21 anos de idade, foi encaminhado para o Ambulatório de Dermatologia da Universidade do Estado do Pará, na Cidade de Belém, Estado do Pará, Brasil, com um diagnóstico de hanseníase dimorfa desde os 10 anos de idade. Depois de alguns anos, o paciente desenvolveu cicatrizes de superfície apergaminhada com diagnóstico compatível com lesões decorrentes de anetoderma secundária à hanseníase. **CONSIDERAÇÕES FINAIS:** Uma afecção dermatológica, embora rara, pode ser associada a doenças sistêmicas comuns, como a hanseníase, e a descoberta dessas afecções é então enfatizada. Sua investigação e exclusão são necessárias quando confrontadas com tais circunstâncias.

Palavras-chave: Anetoderma; Hanseníase; Dermatopatias Bacterianas; Tecido Elástico.

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RESUMEN

OBJETIVO: Relatar un caso de anetoderma secundaria en un paciente con hanseniasis dimorfa y, consecuentemente, llamar la atención sobre asociación no común entre anetoderma y hanseniasis. **RELATO DE CASO:** un hombre pardo, de 21 años de edad, fue encaminhado al Ambulatorio de Dermatología de la Universidad del Estado de Pará, en la ciudad de Belém, Estado de Pará, Brasil, con un diagnóstico de hanseniasis dimorfa desde los 10 años de edad. Después de algunos años, el paciente desarrolló cicatrices de superficie apergaminada con diagnóstico compatible con lesiones decurrentes de anetoderma secundaria a la hanseniasis. **CONSIDERACIONES FINALES:** una afección dermatológica, aunque rara, puede ser asociada a enfermedades sistémicas comunes, como la hanseniasis, enfatizándose el hallazgo de dichas afecciones. La investigación y la exclusión de la misma se hacen necesarias cuando confrontadas con tales circunstancias.

Palabras clave: Anetoderma; Lepra; Enfermedades Cutáneas Bacterianas; Tejido Elástico.



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