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Case Report

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Crusted Scabies: A great mimicker of Chronic Plaque Psoriasis

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Abstract

Crusted scabies is a rare and highly contagious form of scabies that is caused by an ectoparasite, *Sarcoptes scabiei* var. *Hominis*, which mainly affects immunosuppressed individuals.

Chronic plaque psoriasis is typified by itchy, well-demarcated circular-to-oval bright red/pink elevated lesions (plaques) with overlying white or silvery scale, distributed symmetrically over extensor body surfaces and the scalp.

Here we report a case of a 70-year-old woman of Norwegian scabies, immunocompetent, HCV positive diagnosed with depression disorder with a history of pruritus, with improper hygiene habits with skin lesions mimicking chronic plaque psoriasis.

Keywords: Scabies, Chronic plaque psoriasis

Introduction

Crusted scabies is a rare and highly contagious form of scabies that is caused by an ectoparasite, *Sarcoptes scabiei* var. *Hominis*, which mainly affects immunosuppressed individuals.¹ Clinically, it may simulate various dermatoses such as Psoriasis, Darier's disease, Seborrheic dermatitis, among others.² It is characterized by uncontrolled proliferation of mites in the skin, extensive hyperkeratotic scaling, crusted lesions, and variable pruritus. Chronic plaque psoriasis is typified by itchy, well-demarcated circular-to-oval bright red/pink elevated lesions (plaques)

with overlying white or silvery scale, distributed symmetrically over extensor body surfaces and the scalp.

We report a case of a 70-year-old woman, immunocompetent, HCV positive diagnosed with depression disorder with history of pruritus, with improper hygiene habits who had erythematous, well-defined psoriasiform plaques, covered with crusts, on her neck, axillary folds, breast, periumbilical region, groin area, besides upper back and elbows, buttocks, palms, and soles, mimicking chronic plaque psoriasis.

Case Report

A 70-year-old woman presented with a 2-month history of a painful erythematous scaly eruption on her trunk and extremities, associated with mild pruritus with diurnal variations. Despite these symptoms, she did not seek medical help because of negligent behavior.

Besides the depression disorder, the patient was also being diagnosed HCV positive. History of itching was also present in other 3 members of the family.

Physical examination revealed sharply demarcated, erythematous, well-defined plaques covered with crusts, on her neck, chest, periumbilical region, axillary folds, elbows, upper back and groin area, buttocks, palms, and soles (Fig 1,2).



Fig 1. Bilateral Crusted plaques over palmer areas



Fig 2. Bilateral erythematous crusted plaques over extensors

At first, the eruption was misdiagnosed as chronic plaque psoriasis and the patient was initially treated with methotrexate 7.5mg/week and the application of 3% salicylic acid and 0.05% clobetasol cream but she showed no improvement.

A couple of weeks later, unexpected histopathological findings revealed epidermal hyperparakeratosis and acanthosis; numerous

adult mites transected in the stratum corneum; the dermis showed superficial perivascular infiltrate, predominantly by lymphocytes. These findings supported the diagnosis of crusted Norwegian scabies.

A microscopic examination was made. Scrapings of the lesions showed an abundance of adult mites, eggs and faecal pellets of *Sarcoptes scabiei* by KOH mount(Fig 3).

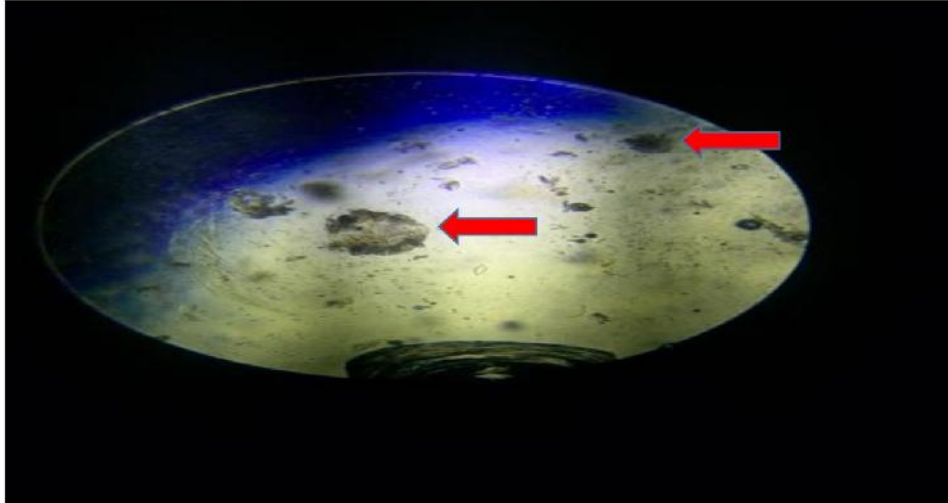


Fig 3. Scabies mite

Routine laboratory tests were requested in order to exclude severe systemic diseases and immunosuppressive disorders and were came out to be normal.HCV was positive while HIV Elisa , antinuclear antibodies and rheumatoid factor were negative.

The previous treatment was discontinued. Aggressive therapy was performed with three doses of 200mcg/kg oral ivermectin 1 week apart in combination with topical permethrin 5% lotion applied once daily for two days in a row, one week apart for two weeks. This extensive treatment cleared the crusted skin lesions(Fig 4)



Fig 4 . After 2 weeks of tratment with Ivermectin and 5% permethrin

Discussion

Crusted or Norwegian scabies is a highly contagious, ectoparasitic infection transmitted by *Sarcoptes scabiei*, mainly affecting immunosuppressed patients, such as individuals with human T-cell lymphotropic virus 1, human immunodeficiency virus, leukemia, lymphoma, organ transplant recipients, and during the use of immunosuppressive therapy.¹ Among this group, the weak immune response fails to contain the disease and there is no impulse to scratch, resulting in fulminant hyper-infestation.^{3,4,5}

Additional non-immunosuppressive conditions like neuropathy, severe arthropathies, mental retardation and psychiatric disorders are also risk factors because of the inability to scratch in response to itch.⁵ Scratching is important to remove scabies mites and to destroy its burrows.^{4,6}

As a reaction to the massive infestation, the horny layer thickens, forming crusted and warty hyperkeratotic lesions, mimicking other dermatoses such as psoriasis², seborrheic dermatitis, Darier's disease, dermatitis herpetiformis, and drug-induced eruptions.⁷

Given a large number of mites in the epidermis and the hyperkeratotic skin, Norwegian scabies can be very difficult to treat, especially if the patient is immunosuppressed. Therefore, this condition generally requires repeated application of topical and systemic scabidical agents.⁸

Chronic plaque psoriasis is typified by itchy, well-demarcated circular-to-oval bright red/pink elevated lesions (plaques) with overlying white or silvery scale, distributed symmetrically over extensor body surfaces and the scalp.

In our case, although immunocompetent, the patient had depression disorder and HCV positive. Therefore, since she started to present the first lesions, two months ago, she ended up not being well-cleaned and not manipulating the injuries, which caused the exuberant and unusual presentation. Due to the presence of psoriasisiform

plaques covered with crusts and lesion distribution in a few areas traditionally affected by psoriasis, the eruption was misdiagnosed as chronic plaque psoriasis.

Our case highlights the importance of keeping an open mind about Norwegian scabies in the differential diagnosis of skin diseases coursing with hyperkeratotic and verrucous plaques, even in immunocompetent individuals with no obvious risk factor for the disease.

A high index of suspicion and early diagnosis help in successfully curing and containing the spread of this highly contagious and deceptive form of scabies.

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References

1. Subramaniam G, Kaliaperumal K, Duraipandian J, Rengasamy G. Norwegian scabies in a malnourished young adult: a case report. *J Infect Dev Ctries* 2010;4:349–351.
2. Gach JE, Heagerty A. Crusted scabies looking like psoriasis. *Lancet* 2000;356:650.
3. Suzumiya J, Sumiyoshi A, Kuroki Y, Inoue S. Crusted (Norwegian) scabies with adult T-cell leukemia. *Arch Dermatol* 1985;121:903–904.
4. Magee KL, Hebert AA, Rapini RP. Crusted scabies in a patient with chronic graft-versus-host disease. *J Am Acad Dermatol* 1991;25:889–891.
5. Hengge UR, Currie BJ, Jäger G, Lupi O, Schwartz RA. Scabies: A ubiquitous neglected skin disease. *Lancet Infect Dis* 2006;6(12):769–79.
6. Nurdan S, Kutlu, MD Enver Turan, MD Asli Erdemir, MD. *Cutis* 2014;94(2):86-88, 95.
7. Monari P, Sala R, Calzavara-Pinton P. Norwegian scabies in a healthy woman during oral cyclosporine therapy. *Eur J Dermatol* 2007;17:173.

8. MSandre, F Ralevski, N Rau. An elderly long-term care resident with crusted scabies. Can J Infect Dis Med Microbiol 2014;25(1):39-40.

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