

Crusted scabies in AIDS patient, a clinical challenge to be sorted out with a simple bedside test

Bonthu Indira, Darsan S

Department of DVL, Government General Hospital, Kakinada, Andhra Pradesh, India

Address for correspondence:

Dr. Darsan S, Department of DVL, Government General Hospital, Kakinada - 533 001, Andhra Pradesh, India.

E-mail: dhakdarsan@gmail.com

Abstract

Norwegian or crusted scabies is a highly contagious severe variant of scabies described first among leprosy patients in Norway in 1848 by Boeck and Danielsen. Herein, we report a case of crusted scabies in an AIDS patient with large hyperpigmented macules covered with thick crusts present over the axilla, inguinal region, and gluteal region. Treatment started immediately with ivermectin, permethrin, and keratolytics after doing KOH microscopy. Mite population may exceed 1 million/person. Hence, it is highly infectious and can set off epidemics of scabies in home or institutions.

Key words: AIDS, crusted scabies, immunocompromised, ivermectin, scabies mite

A 30-year-old male on antiretroviral drugs for the past 7 years presented to the outpatient department with itching all over his body for the past 2 months. It started as small papules over his thigh with itching sensation more toward night. He was treated with antifungals and topical steroids from periphery, following which the lesions got aggravated. On examination, large hyperpigmented macules covered with thick crusts were present over the axilla, inguinal region, and gluteal region, and multiple papules with burrows were seen over the interdigital spaces of both hands [Figure 1]. On evaluation, he had mild anemia and CD4 count was 190 cells/mm³.

KOH mount of the scrapings done from burrows demonstrated adult mite with eggs of *Sarcoptes scabiei*, and histopathology showed a burrow containing adult scabies mite in stratum corneum [Figure 2].

Treatment started according to the severity grading scale for crusted scabies devised by Davis *et al.* of the Royal Darwin Hospital.^[1] The patient belonged to Grade 2. Hence, five doses of ivermectin at a dose of 200–250 mcg/kg was administered on days 0, 1, 7, 8, and 14 along with topical treatment of permethrin 5% cream and salicylic acid 5% in petrolatum application on alternate days at night for the first 7 days and then twice weekly until cure. Family members were counseled for the use of permethrin 5% cream and advised to wash all clothes and bedding by hot water. Follow-up visit after 15 days of lesions showed complete resolution [Figure 3].

Crusted scabies typically develops in patients with a defective T-cell immune response (e.g., AIDS and leukemia) or decreased cutaneous sensation and reduced ability to mechanically debride the mites. Crusted scabies can act as a point of entry to microbes and finally lead to sepsis, since the immune system is already compromised.^[2]

Hence, any crusted lesions in an AIDS patient should alert suspicion and should be evaluated for crusted scabies by doing a KOH mount.



Figure 1: Posttreatment image showing clearing of lesion over inguinal region (left) and gluteal region (right)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Indira B, Darsan S. Crusted scabies in AIDS patient, a clinical challenge to be sorted out with a simple bedside test. Indian J Sex Transm Dis 2022;43:246-7.

Submitted: 14-Mar-2022

Revised: 17-Mar-2022

Accepted: 08-Apr-2022

Published: 01-Aug-2022

Access this article online

Quick Response Code:



Website:

www.ijstd.org

DOI:

10.4103/ijstd.ijstd_31_22

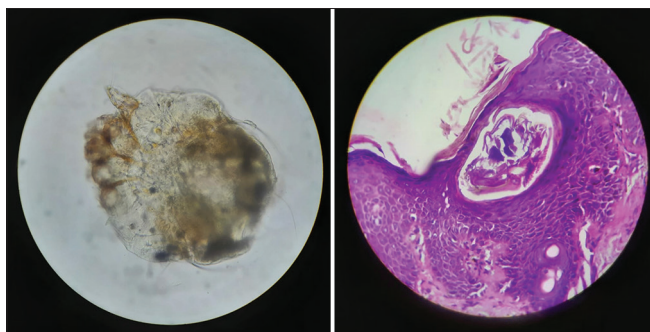


Figure 2: 10% KOH microscopy of adult mite of *Sarcoptes scabiei* (left) and histopathology showing a burrow containing adult scabies mite in stratum corneum (right)

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.



Figure 3: Hyperpigmented macules covered with crusting over inguinal region (left) and gluteal region (right)

Conflicts of interest

There are no conflicts of interest.

References

1. Davis JS, McGloughlin S, Tong SY, Walton SF, Currie BJ. A novel clinical grading scale to guide the management of crusted scabies. *PLoS Negl Trop Dis* 2013;7:e2387.
2. Glover A, Young L, Goltz AW. Norwegian scabies in acquired immunodeficiency syndrome: Report of a case resulting in death from associated sepsis. *J Am Acad Dermatol* 1987;16:396-9.