

## Case Report Crusted Scabies –A Case Report

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**Abstract:** A 21 year old female was admitted to the dermatology ward with complaints of itching all over the body since three months and swelling of face and legs since one week. Erythematous and skin coloured papules were seen over the face, legs and abdomen. Hyperpigmented macules were present over the extremities, abdomen and back. Potassium Hydroxide (KOH) mount of the scrapings from the crusted skin lesions showed plenty of adult mites of *Sarcoptes scabiei*. A diagnosis of crusted scabies was made. Patient was treated with Tab. Ivermectin, Tab. Ceterizine and topical Permethrin, which resulted in complete resolution.

**Keywords:** Scabies, Norwegian, Ivermectin,

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### 1. INTRODUCTION

*Sarcoptes scabiei* or the itch mite is a parasite arthropod that burrows into skin and causes scabies. Humans are not the only mammals who can become infected. Domesticated dogs and cats and other mammals such as ungulates, wild boars are affected<sup>[1]</sup>.The discovery of Itchmite in 1687 marked scabies as the first disease of humans with a known cause<sup>[2]</sup>.Crusted scabies , previously referred to as Norwegian scabies was first described in 1848 by Danielessen and Boeck in Norwegian patients with Leprosy<sup>3</sup>.Crusted scabies is characterized by hyperkeratotic and scaly plaques caused by overwhelming infection with *Sarcoptes scabiei* mites.<sup>[3, 4]</sup>The lesions in Norwegian scabies are classically distributed on the extremities, but are frequently found on the back, face, scap and around the nail folds<sup>[5]</sup>Norwegian scabies is extremely infectious, early diagnosis and prompt therapeutic interventions helps in infection control. Patients with diseases such as leprosy, immune deficiency disorders, malnutrition, HIV and malignancy, as well as the elderly and those with Down's syndrome and mental retardation, are more prone to develop Norwegian scabies.<sup>[6]</sup>

We report a case of Norwegian scabies with lesions all over the body in a young woman.

### 2. CASE REPORT

A 21 year old female patient was admitted with complaints of itching all over the body since 3months which did not have diurnal variation. She also complained of swelling of face and legs of one week duration which was gradual in onset. She had consulted a local doctor and was

prescribed T. clotrimazole and T. Medroxyprogesterone T. Azithromycin 500 mg and Fusidic acid.

She took the oral medications on and off and did not apply topical medication. There was no similar complaints in the past. She had no history of diabetes mellitus, hypertension or bronchial asthma. She had irregular menstrual cycle – once in 2 months, normal flow. No dysmenorrhoea.

On examination the patient was moderately built and nourished, well oriented to time, place, and person. She weighed 53 Kgs, her pulse rate was 82/b.p.m, BP- 110/60 mmhg with bilateral pedal oedema.

Examination of other systems were normal

Cutaneous examination revealed erythematous skin coloured papules over face, legs and abdomen. Hyperpigmented macules were seen over the extremities, abdomen. Hyperpigmented plaques were found over the dorsa of feet, plantar surface of toes.

Microscopic examination of scrapings from the hyperkeratotic lesions from trunk showed plenty of mites of *Sarcoptes scabiei*. (Figure - 1, 2.)

### 2.1. *Sarcoptes scabiei* in KOH Preparation

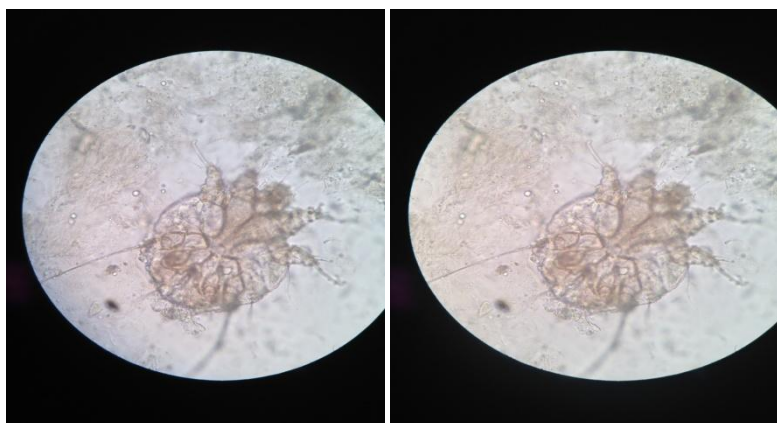


Fig 1

Fig 2

HIV status of patient was not known.

The case was diagnosed as Norwegian scabies. The patient was treated with T. Ivermectin 12 mg. stat and repeated at weekly intervals for a total of 3 doses, T. ceterizine once a day and topical permethrin.

### 3. DISCUSSION

The discovery of the Itch mite in 1687 marked scabies as the first disease of humans with a known cause<sup>2</sup>. The disease produces intense, itchy skin rashes when the impregnated female tunnels into the stratum corneum of the skin and deposits eggs in the burrow. The larva, which hatches in 3 to 10 days, moves about on the skin, moults into the nymphal stage and then matures into an adult mite.

The adult mites live for 3 to 4 weeks in the host's skin<sup>7</sup>. In the past, crusted scabies was a rare form which was seen mostly in immunocompromised and mentally debilitated patients with increasing use of different immunosuppressive therapies and increasing number of HIV patients. Diagnosis of crusted scabies is not so rare as it was in the past. To date more than 200 cases have been reported<sup>[4]</sup>

Immunocompetent patients rarely develop crusted scabies<sup>[6]</sup>.

We report a female patient who had itching all over the body and swelling of legs and face. She was treated with clotrimazole, medroxyprogesterone, azithromycin (500mg), and topical fusidic acid. She was on and off oral medication and did not use the topical medication. Since the patient was not relieved of symptoms, she visited the tertiary care hospital and was admitted and investigated. Hyperpigmented macules were seen over the extremities, abdomen and back. Hyperpigmented plaques were found over the dorsa of the feet and plantar surface of toes.

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Microscopic examination of the scrapings from the lesions showed plenty of mites of *Sarcoptes scabiei*. A diagnosis of crusted scabies was made.

Crusted scabies is a highly contagious disease easily transmitted through fomites in addition to direct contact and thus capable of triggering epidemic scabies. The patient was treated with Ivermectin (12mg stat, 1 to 2 weeks interval, 3 doses), Ceterizine (0-0-1) and topical Permethrin. The lesion resolved and the patient was discharged. Her father had similar complaints six months back and was cured.

It is important to correctly diagnose the crusted scabies, as misdiagnosis may lead to spreading of the infection and super infections. It is important to treat the other family members as the disease is highly contagious.

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