Unexpected crusted scabies in an elderly woman without any immunosuppression

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DESCRIPTION

A 75-year-old woman without any particular medical history, presented with an intensively pruritic scaly rash over the body for 8 months duration.

On examination, diffuse, scaly, crusted, hyperkeratotic, erythematous patches and plaques were seen over the body. The lesions were accentuated on the groins, the fold of the wrist, breast, around waistline, abdomen, between fingers and face (figure 1). Other systems examination was unremarkable, and no family similar case was reported.

Blood count and serological tests were performed, and all laboratory data were within normal range.

The diagnosis of crusted scabies was established on the basis of the clinical results and confirmed by light microscopic examination of skin scraping.

Human scabies is a skin infestation caused by an obligate human ectoparasite mite *Sarcoptes scabiei* var. *hominis* that results in a variable pruritic eruption, with a characteristic distribution pattern.¹

Crusted scabies (Norwegian scabies) is a rare and highly contagious form of scabies that is characterised by uncontrolled, proliferation of mites and eggs in the skin,^{1,2} and widespread, crusted, hyperkeratotic papules, plaques and nodules.^{3,4}

As the mites burrow and lay eggs inside the skin, the infestation leads to relentless itching, the stratum corneum thickens and forms warty crusts as a reaction to the high mite burden.⁵

In common scabies, there are few mites, probably because scratching destroys the burrows. A good standard of hygiene may also help to control the mite population.^{1,4}

The mites in crusted scabies are not more virulent than in non-crusted scabies; however, they are much more numerous (up to 2 million/patient).⁵

Anyone can get scabies, but crusted scabies is usually seen in patients with mental impairment, physical incapacity and immunosuppression;³ its occurrence in healthy individuals has rarely been reported.^{2,4}

In addition to spreading scabies through brief direct skin-to-skin contact, persons with crusted scabies can transmit scabies indirectly by shedding mites that contaminate items such as their clothing, bedding and furniture. Scabies can be passed easily between family members or sexual partners.^{1,4}

Diagnosis of a scabies infestation usually is made based on the customary appearance and distribution of the rash, and the presence of burrows. In our case, skin scraping samples were taken from the thick, scaly, crusted white plaques in the gluteal area. The mites, eggs and faecal matter (scybala) detected by microscopy were significantly abundant (figure 1).

Figure 1 (A,B) Diffuse, crusted and hyperkeratotic patches on the body of an elderly patient. (C) *Sarcoptes* eggs under the microscope (×40). (D) Scybala (arrow points to faecal pellets) under the microscope (×40).

During early stages, scabies may be mistaken for other skin conditions because the rash looks similar.

Crusted scabies should receive quick and aggressive medical treatment for their infestation to prevent future outbreaks of scabies. This case was managed by topical 5% benzoyl benzoate applied daily with acide Salicylic ointment 6% until cure. The pruritus had resolved and no new papules emerged.

This case of crusted scabies is unique in that the patient was healthy and not immunosuppressed.

Learning points

- ▶ Crusted scabies (Norwegian scabies) is a severe debilitating disease due to hyperinfestation with the ectoparasite *Sarcoptes scabiei* var. *hominis*. It is characterised by intensively pruritic scaly rash over the body.
- ▶ Usually, crusted scabies occurs in patients with compromised immunity and it is rare in older, healthy patients, as illustrated in our case.
- ▶ Due to the huge risk of contamination, the ideal technique to prove crusted scabies is the parasitological examination to rapidly detect eggs, scybala or adults of the mite. Moreover, light microscopic examination is simple and can rule out other skin disease, especially at early stages, when scabies may be mistaken for other skin conditions because the rash looks similar (eg, eczema or psoriasis).

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