Microscopic (video) demonstration of *Sarcoptes scabiei* mite

Anusuya Sadhasivamohan, Vijayasankar Palaniappan, Kaliaperumal Karthikeyan, Jayapartha Selvaarasan

**DESCRIPTION**

A woman in her 60s presented with a 5-month history of extensive, non-itchy, scaly rash over her body. Dermatological examination showed diffuse erythematous scaly crusted plaques over her left elbow, breasts, axillae and groin folds (figure 1). Initially, the lesions started over her elbows and were diagnosed as psoriasis vulgaris by a general physician for which topical 0.05% clobetasol propionate ointment application at night was advised. Over the next 4 months, she developed new lesions over the above-mentioned sites and self-prescribed the same topical corticosteroid. She had no other medical comorbidities and her systemic examination was normal. There was no remarkable family history. Her haematological parameters, liver function test, renal function test, blood glucose and HIV serology were normal. A microscopic examination of the scrapings from the elbow lesion demonstrated multiple *Sarcoptes scabiei* mites, eggs and scybala (video 1). A diagnosis of crusted scabies incognito was made. She was admitted to an isolation ward, treated with oral ivermectin 200 µg/kg on days 1, 2, 8 and topical 5% permethrin cream overnight application for a week.

Crusted scabies is a highly contagious variant characterised by uncontrolled proliferation of *Sarcoptes scabiei* mites. A classical scabies patient can have only few mites whereas crusted scabies can present with about two million mites. It is characterised by hyperkeratosis and crusting of the skin primarily affecting individuals with defective T-cell response, physical debilitation, mental debilitation, neurological disorders and immunosuppression. The diagnosis is usually based on clinical findings and microscopic findings of the skin scraping. The demonstration of mites, eggs and their faeces (scybala) is diagnostic of crusted scabies. Hence, any crusted lesion in a patient with risk factors for crusted scabies should be subjected to...
microscopic examination as this disease entity has the potential to trigger endemic outbreaks.

Contributors AS: capturing of video; VP: written the manuscript; JS: assisted in capturing of video; KK: revision of manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Consent obtained directly from patient(s).

Provenance and peer review Not commissioned; externally peer reviewed.

Images in... Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

ORCID ID Vijayasankar Palaniappan http://orcid.org/0000-0003-1331-4554

REFERENCES