Oral ivermectin treatment for an infant with crusted scabies

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A fully vaccinated 4-month-old girl with normal development was referred to our dermatology clinic for an intensely itchy, diffuse papular rash that had been present for 3 months. Her family physician had initially diagnosed eczema and treated with betamethasone valearate 0.05% ointment, but later diagnosed impetigo and treated with topical and systemic antibiotics, which resulted in no improvement. She improved mildly after 2 courses of 5% permethrin and 0.1% (w/w) mometasone lotion for suspected scabies.

When the patient visited our clinic, we saw wide-spread polymorphous eruptions consisting of erythematous papules, pustules and dermatitic plaques on her back, posterior neck, scalp and inguinal folds. Her palms had a pustular appearance, and her soles had erythematous, crusted, hyperkeratotic plaques (Figure 1). Dermoscopy showed central crusting and furrows, suggestive of crusted scabies. We performed a skin biopsy because of the patient's poor response to permethrin, which confirmed crusted scabies. We prescribed oral ivermectin (1 200 µg/kg dose per wk) for 3 weeks to both her

and family members living in the same household. We also prescribed betamethasone 0.1% ointment twice daily and oral rupatadine (1 mg) daily. We asked the infant's parents to clean household fabrics at high temperatures or to bag items for 2 weeks to avoid reinfestation. Two months later, she had fewer erythematous papules and pustules.

Crusted scabies, or Norwegian scabies, is an uncommon, highly contagious form of the condition, with excessive proliferation of *Sarcoptes scabiei* var. *homini* on the skin.¹ It is seen most commonly in immunocompromised children and does not usually colonize healthy infants.² Oral ivermectin has been approved for the treatment of scabies in children weighing more than 15 kg, but is currently used in infants off label. A recent study of





Figure 1: Photographs of a 4-month-old infant with crusted scabies, showing (A) diffuse, crusted and hyperkeratotic scales that involved the entire plantar surface bilaterally, and (B) diffuse, erythrodermic papules and pustules, with desquamation and papulonodular lesions, that affected the leg and popliteal fossa.

170 infants aged 1–64 months found oral ivermectin to be effective, with no severe adverse effects; therefore, it can be a treatment option in patients for whom standard treatment with topical permethrin and management of post-scabetic itch fails to control symptoms.³

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