

# Erythema annulare centrifugum in a child

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An 8-year-old boy presented to the dermatology clinic with a 1-month history of painful, desquamative, crusted and ring-shaped polycyclic rash (Figure 1A and B) that was initially limited to his neck and axillae before it spread to his trunk and arms. The patient's medical history was unremarkable, and he was not taking any medication. On physical examination, we found no sign of tinea infection. Skin bacterial

cultures were negative. We prescribed empiric oral cephalexin (50 mg/kg/d for 1 wk) for suspected impetigo, but the lesions did not improve. A punch biopsy (4 mm) of the right flank showed subacute spongiotic dermatitis with confluent parakeratosis and a perivascular infiltrate with lymphocytes and eosinophils, consistent with the diagnosis of superficial erythema annulare centrifugum. We prescribed topical betamethasone dipropionate cream for 3 weeks, which resulted in complete clearance of the lesions. At 1-year follow-up, the patient had no sign of recurrence or scarring.

Erythema annulare centrifugum is a benign inflammatory skin disease that can occur at any age, without gender predilection. The incidence is unknown. Superficial and deep subtypes have been described.<sup>1</sup> Pathophysiology is still uncertain and erythema annulare centrifugum has sometimes been associated with infections (particularly dermatophytic infections), foods, drugs, hematologic and endocrine diseases, and neoplasias.<sup>1,2</sup> In most cases, including this one, no triggering agent can be found. Extensive investigations are not mandatory in healthy patients. Superficial erythema annulare centrifugum usually presents as erythematous squamous plaques that grow centrifugally, and evolve over a few weeks into annular or polycyclic, elevated plaques with a clear centre and an internal scaly rim.<sup>3</sup> Erythema annulare centrifugum predominantly affects the trunk and proximal extremities, and can sometimes be pruritic. The differential diagnosis includes impetigo, annular psoriasis, granuloma annulare and tinea corporis. Erythema annulare centrifugum may regress spontaneously or recur over a period of months to years.<sup>1</sup> Diagnosis is mostly clinical, but a skin biopsy can help rule out other diagnoses. Group III and IV topical corticosteroids and oral antihistamines can provide symptomatic relief.



**Figure 1:** (A) Polycyclic and annular erythematous desquamative plaques on the torso and (B) crusted plaques on the upper arms and armpit area of an 8-year-old boy with a recent diagnosis of superficial erythema annulare centrifugum.

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