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Targetoid bullous tinea corporis: Unusual presentation of a dermatophyte infection

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Sir,

Bullous lesions in tinea are uncommon and are usually seen in the setting of tinea pedis. Commonly reported causative fungal pathogens are *Trichophyton rubrum* and *Trichophyton mentagrophytes*.[1] We report a case of *Microsporum canis* causing targetoid bullous tinea corporis.

A 35-year-old woman gave a 6-day history of a generalised pruritic eruption involving the trunk and limbs. She had travelled to Kuantan, Malaysia and Bintan Island, Indonesia, in the past few weeks. One week prior to the onset of the rash, whilst in Kuantan, she had carried a stray kitten which scratched her on the neck. She reported no other contactants or medications prior to the eruption. She had no fever or mucosal involvement and was otherwise systemically well. Her past medical history was significant only for female pattern hair loss and alopecia areata, which was quiescent. On examination, multiple umbilicated targetoid papulovesicular lesions were seen over the neck, trunk, upper and lower limbs [Figure 1a-c]. The palms, soles, oral and conjunctival mucosae were not involved. She did not have any lymphadenopathy.

The differential diagnoses considered were erythema multiforme, syphilis, ecthyma, orf and cat scratch disease. A full blood count was unremarkable and rapid plasma reagin was negative.

Histology from the edge of a left forearm blister showed subcorneal neutrophils, spongiosis of the epidermis with neutrophilic exocytosis and prominent upper dermal oedema resulting in subepidermal pseudovesiculation, as well as septate fungal hyphae within the stratum corneum, which were seen on periodic acid–Schiff and Gomori methenamine silver stain [Figures 2a and b].

She was diagnosed with bullous tinea corporis and commenced on oral terbinafine 250mg daily. Her lesions completely cleared in 3 weeks [Figures 3a and b]. Cultures from the biopsy later returned positive for *M. canis*. *M. canis* is a zoophilic fungus, which usually causes

Figure 1a: Multiple umbilicated targetoid papulovesicular lesions over the neck and trunk

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Figure 1b: Multiple umbilicated targetoid papulovesicular lesions over the neck, trunk, and upper limbs

Figure 1c: Close-up view of targetoid papulovesicular lesions over the right forearm

Figure 2a: Epidermal spongiosis with subcorneal neutrophils, and prominent upper dermal edema resulting in subepidermal pseudovesiculation (H and E, ×40)

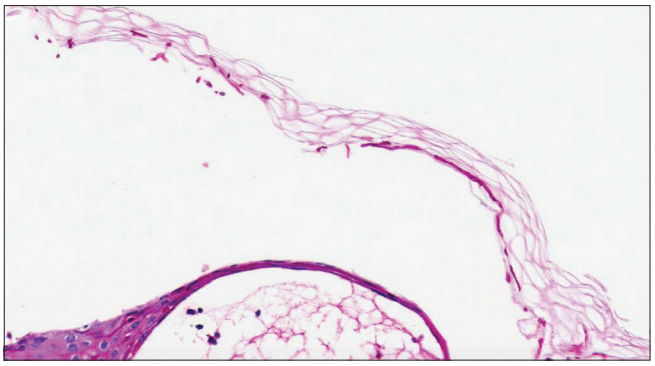

Figure 2b: Septate fungal hyphae within the stratum corneum (Periodic acid-Schiff stain, ×200)

Figure 3a: Complete resolution of the patient's lesions after 3 weeks of oral terbinafine

Figure 3b: Complete resolution of the patient's lesions after 3 weeks of oral terbinafine

infection in dogs, cats, and other animals.[2] The first case of *M. canis* causing bullous tinea was reported in 1993 and we found only 3 reports in the published literature.[3] Our patient had a clear history of contact with a likely infected animal.

Bullous tinea corporis, owing to the rarity of its presentation, can be mistaken for a variety of dermatoses such as erythema multiforme, bullous allergic contact dermatitis and linear IgA bullous dermatosis. In fact, in one reported case, the authors empirically started treatment with dapsone for linear IgA

bullous dermatosis before a change in the morphology of the lesions prompted them to send samples for direct microscopy, which returned positive for hyphae.[4]

We hope that this report of targetoid bullous tinea corporis will encourage clinicians to consider a fungal aetiology in the differential diagnoses of generalised targetoid bullous lesions in contrast to the annular scaly plaques usually expected in tinea.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

Shi Yu Derek Lim, Joyce Siong See Lee, Wei-Sheng Chong

National Skin Centre, Singapore

Corresponding author:
Dr. Shi Yu Derek Lim,
Department of Dermatology, National Skin Centre,
1 Mandalay Road, Singapore 308205.
derek.lim@mohh.com.sg

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Clear zone phenomenon: A rare phenomenon in ichthyosis with co-existing superficial fungal infection

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Sir,

Ichthyosis is a common disorder of keratinization, manifesting as noninflammatory scaling, which may range in severity from minimal involvement of a few sites to generalized scaling. Several types of ichthyosis have been classified according to the inheritance, clinical appearance, pathological features and systemic involvement.

Cutaneous dermatophytosis is a common condition with a global prevalence of nearly 20%–25%.[1] The most common species implicated for dermatophytosis in India is *Trichophyton rubrum*.[2] There are a handful of reports describing the coexistence of dermatophyte infections in patients with ichthyoses. We hereby report two cases of unusual presentations of dermatophyte infections showing clearing of ichthyotic scaling in patients with congenital ichthyosis.

A 16-year-old Indian male, known case of X-linked recessive ichthyosis (XLRI), presented with itchy lesions in the groin of 20 days duration. Examination revealed generalized light-brown coloured adherent polygonal ichthyotic scales with upturned edges. There were well-defined erythematous scaly plaques in bilateral groins extending to inner thighs suggestive of tinea cruris with a peculiar finding of clear uninvolved zone between the erythematous plaque and ichthyotic skin [Figure 1]. Dermoscopy showed erythema and thicker white scales following the skin creases in the erythematous plaque (probably due to affinity of fungus towards creases due to increased moisture content), surrounded by a clear zone showing neither erythema nor scaling and the adjacent ichthyotic skin showed fine white scales irregularly arranged not respecting the skin creases [Figure 2]. Potassium hydroxide (KOH) mounts and cultures were done from the

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