

## Erythroderma Due to Dermatophyte

*Sir,*

The term "erythroderma" is generally used to describe any inflammatory skin condition with erythema and scaling which affects more than 90% of the body surface (1). Various causes of erythroderma include psoriasis, drugs, contact dermatitis, eczemas, pemphigus, ichthyosis, lymphoma, leukaemia, internal malignancy, lichen planus, pityriasis rubra pilaris, sarcoidosis and acquired immunodeficiency syndrome. Rarely, dermatophytosis may present as erythroderma (1, 2). Recently, we have seen a case of erythroderma due to dermatophyte.

### CASE REPORT

A 66-year-old female presented with erythema and scaling over the whole body. The history dated back to August 1995 when she noticed itching on both legs, on the central part of the chest and under both breasts. During the next 10 days she developed erythematous scaly patches on both legs, the arms, axillae and chest along with swelling of both eyes. She was not taking any drugs orally. Scraping for fungal mycelia at this stage was reported to be negative. She was given triamcinolone acetonide 0.1% ointment topically with cyproheptadine hydrochloride 2 mg orally daily, resulting in an improvement in itching, erythema and scaling from all the lesions during the next 3 days. However, on continuing triamcinolone acetonide topically she developed erythematous lesions all over the body during the next 30 days. At this stage she was seen by us with generalized intense erythema and fine scaling all over the body with active border in some places. There was pitting oedema on both legs and feet with secondary infection. Scraping prepared in 10% KOH solution from the active border of the lesion showed mycelia of dermatophytes. Her haemoglobin was 9.9 g% with microcytic hypochromic anaemia. Erythrocyte sedimentation rate was 55 mm in the first hour; SGOT, SGPT, alkaline phosphatase, serum creatinine, urea, uric acid, calcium, bilirubin and routine urine examination were normal. Total serum protein was 5 g%, with albumin 3.6 g% and globuline 1.4 g%. She was advised to take thorough bath with soap and to use shampoo for cleaning her hair, along with topical massage of miconazole 2% cream, fluconazole 150 mg orally daily, cefuroxime 250 mg twice daily with cyproheptadine hydrochloride 4 mg orally if needed for itching. All the lesions started to heal during the next 10 days with complete disappearance of secondary infection when the cefuroxime was stopped. During the next 20 days erythema and scaling of the whole body disappeared; oral fluconazole was also

stopped at this stage. However, she developed dryness and itching on her back and abdomen which was controlled in 10 days with topical application of emollient and oral cyproheptadine hydrochloride 4 mg four times daily orally. There was no recurrence of the lesion during the next 2 years of follow-up.

### DISCUSSION

The absence of fungal mycelia initially in the scraping from the lesion seen in KOH preparation by the pathologist misled the treating dermatologist, who started triamcinolone acetonide topically with the erroneous diagnosis of non-fungal dermatoses. This led to the spread of the erythema and scaling all over the body. Though initially we also planned to take a biopsy to rule out psoriasis or any other cause of erythroderma, but sharp active border in some places prompted us to consider the diagnosis of dermatophytosis. The presence of multiple mycelia without spores in KOH preparation from the active border confirmed our suspicion that the patient had dermatophytosis. Complete clearance of scaling and erythroderma with oral fluconazole 150 mg daily and miconazole nitrate cream 2% topically further proved that the erythroderma was due to dermatophyte. Unfortunately we could not culture the causative fungus. However, erythematous, scaly and in some places psoriasiform lesions suggest that it could have been due to *Trichophyton rubrum*.

### REFERENCES

1. Burton JL, Holden CA. Eczema, lichenification and prurigo. In: Champion RH, Burton JL, Burns DA, Breathnach SM, editors. Textbook of dermatology. Oxford: Blackwell Scientific Publications, 1998: 673–677.
2. Potekaevev NS, Novoselov VS. *Trichophyton rubrum* induced erythroderma. *Vestnik Dermatol Venereol* 1990; 4: 74–76.

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