all patients are neutropenic.

Treatment should include prompt recognition of the skin lesion, appropriate antibiotic therapy for Pseudomonas aeruginosa, and surgical debridement. Clinicians should be aware of the skin manifestations of ecthyma gangrenosum to avoid fatal septicemia in neutropenic patients.

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A study of chronic dermatophyte infection in a rural hospital

Sir,

Chronic dermatophytosis is a refractory condition, which runs a course of more than one year with episodes of exacerbations and remissions.[1] Factors responsible for chronicity are the site of infection, poor penetration of the drug in the nail keratin, and drug resistance. Some associated conditions are atopic diathesis, disorders of keratinization, diabetes mellitus, Cushing’s syndrome, immunosuppression following renal transplants and AIDS.[2] This work was undertaken to study the clinical and cultural characteristics of patients with chronic dermatophyte infection.

Seventy-five adult patients who had tinea corporis for more than one year, attending the outpatient department of Dermatology Venereology and Leprosy at the Rajah Muthiah Medical College and Hospital were included in the study. Skin scraping was done and stained with 10% potassium hydroxide solution (KOH). Culture was undertaken using Sabouraud’s Dextrose Agar (SDA) medium and incubated at 26-28°C for a period of 3 weeks. Fungal colonies were identified according to the standard procedures. The results were analyzed using the chi-square test.

Onychomycosis was present in 28% of patients, which was found to be a major cause of chronicity, a statistically significant finding (P value < 0.01). An earlier study also postulated that onychomycosis was a cause of chronic dermatophytosis at any site. In our study, chronic dermatophyte infection was associated with more than 40% body involvement, a correlation not observed in earlier reports. We also found that 13.3% of patients were atopics, which was higher than previous reports, however, we did not observe a higher incidence of onychomycosis among these patients. On the contrary, chronicity was definitely correlated with exposure to sunlight in 80.1% of our patients who had excessive exposure for more than three hours per day. Excessive sun exposure precipitates sweating, which favors the growth of dermatophytes. This finding was similar to earlier studies.[3-5] Overcrowding and poor socioeconomic status were correlated with chronicity. Early lesions were neglected and went unnoticed by many patients whereas chronicity compelled them to seek medical advice. The presence of diabetes was confirmed in 13 patients (17.3%) and chronicity was attributed to uncontrolled diabetes in all these patients.

KOH preparation was positive in 88% of cases, similar to the 86% positivity in an earlier study.[3] The negative KOH in 12% could be correlated with the minimal scaling in the lesion. Positive culture was obtained in 41.3% cases. This also correlated with studies done by Gupta et al. Culture negativity could be due to bacterial
Trichophyton rubrum infection of the prepuce

Sir,

Dermatophyte infection of the penis and scrotum is rare. It is difficult to explain why the penile shaft is generally not involved in patients affected by tinea cruris. Glans penis involvement is considered even rarer,[1] whereas dermatophytosis of the prepuce has not been reported in the literature. Here we report a patient who presented with scaly lesion on the prepuce, which on investigation was found to be due to *Trichophyton rubrum*.

A 29-year-old male presented with itching and burning sensation of the preputial sac since the last ten days. He was married and denied history of any extramarital sexual exposure in the recent or remote past. On further enquiry he gave the history that his wife had got ringworm infection of the groin and anterior abdomen but did not have any history of vaginal discharge. On examination, the uncircumcised prepuce showed an erythematous, moist lesion with raised margins (Figure 1). The border of the lesion revealed the presence of moist scales. There was no scaling or any other lesion on the glans, or on the shaft of the penis, scrotum, intertriginous area or elsewhere on the body. The patient was otherwise in normal health.

On investigation, routine examination of blood, serum glucose, VDRL and HIV status could reveal no abnormality. A 10% potassium hydroxide smear prepared from the scaly area of the lesion showed the presence of fungal hyphae. Culture on Sabouraud's dextrose agar media with gentamicin grew *Trichophyton rubrum*. He was treated with 1% clotrimazole gel and started improving in a few days; a repeat culture after contamination or delay in processing the specimen in the laboratory. *Trichophyton rubrum* was the commonest organism, isolated in 17.3% of the cases. Most Indian and western studies have also proved *T. rubrum* as the commonest offending agent.[3,4]

Hence, the factors found responsible for chronicity were (1) onychomycosis (2) body surface area of involvement (3) prolonged sun exposure and (4) diabetes mellitus.

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