

DEEP GENERALIZED DERMATOPHYTOSIS

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ÖZET

DERİN GENERALİZE DERMATOFİTOZ

Trichophyton rubrum enfeksiyonuna bağlı tinea unguium, tinea pedis ve tinea corporisin yanısıra uzun süredir devam eden yaygın subkütan nodülleri, abseleri ve drene fistülleri olan 2 olgu takdim edildi. Drenaj materyallerinden yapılan kültürlerde T. rubrum izole edildi. Dermatofitler, immün defekti olmayan sağlıklı kişilerde nadiren böyle bir tabloya sebep olabildiklerinden olguların sunulması uygun görüldü. Literatür bilgileri taranarak klinik tablo "derin jeneralize dermatofitoz" olarak isimlendirildi.

Anahtar kelimeler: Derin jeneralize dermatofitoz, griseofulvin, itrakonazol.

SUMMARY

In this report, otherwise healthy two patients with deep generalized dermatophytosis characterized by subcutaneous nodules, abscesses, and draining fistulas in addition to tinea unguium, tinea pedis, and tinea corporis were presented. The causative agent was Trichophyton rubrum in both cases.

Key words: Deep generalized dermatophytosis, griseofulvin, itraconazole.

INTRODUCTION

Deep generalized dermatophytosis (syn. tinea profunda, trichophytic granuloma, deep tinea, Majocchi granuloma, dermatophytic pseudomycetoma) is a rare clinical entity in the hosts with normal immunity (1-4). We report here 2 patients with multiple fistulas and subcutaneous nodules in addition to widespread tinea corporis, hyperkeratotic tinea pedis and onychomycosis caused by Trichophyton rubrum.

CASE 1: A 41-year-old man had slowly growing and draining painless nodules on the back of the hands and the thighs as well as disfiguring nails and a chronic scaly eruptions on the lower abdomen and feet for 2 years. He had been treated unsuccessfully with various topical and systemic medicaments.

Examination revealed multiple erythematous, nontender, draining nodular lesions especially localized on the dorsum of the hands and thighs (figure 1). On the lower abdomen, gluteal regions and soles dry, noninflamed, scaly, widespread superficial dermatitis was seen. All nails were thick, brittle and discolored.

The materials separately taken from draining nodules, desquamed lesions and nails were prepared with 20 % potassiumhydroxide. In direct microscopic examination, all preparations showed branching hyphae and spores. The fungal cultures grew Trichophyton rubrum. A biopsy specimen from an indurated nodule on the left hand revealed a granulomatous reaction in the dermis, composed of epitheloid cells, lymphocytes and Langhans' giant cells (Figure 2). X - ray examination of the hands showed



Figure 1: Multiple discharging nodular lesions on the dorsum of the right hand of the first patient.

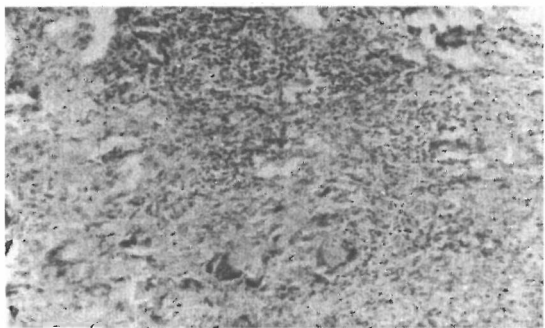


Figure 2: Case 1, granulomatous reaction in the dermis. Langhans' giant cells, epithelioid cells and lymphocytes are seen (H&E.X400).



Figure 3: Two fluctuant nodules on the right cervical region of the second patient.

degeneratif changes in some phalanges. Routine laboratory studies were within normal limits, except for erythrocyte sedimentation rate and leucocyte count that were increased.

With the diagnosis of deep generalized dermatophytosis the patient was started on griseofulvin 1 gr. daily. After 2 months of therapy the lesions showed no response so the dose of griseofulvin was increased to 1.5 gr daily. Ten months later all lesions were almost completely regressed, fungal cultures were negative, but the nails were still deformed.

CASE 2 : A 40-year old man had several erythematous painless fluctuant nodules varying in diameter on the right cervical and presternal regions and multiple fistulas discharging a seropurulent fluid on the left inguinal region for 2 years. In addition a diffuse desquamation on the lower extremities, plantar hyperkeratosis and dystrophic changes on the nails were seen. Before one year, fluctuant lesions on the groins had been drained by a surgeon and he had used various antimicrobial agents including antituberculous drugs with no response.

Examination revealed a solitary, indurated nodule, 4 cm. in diameter, on the right cervical region, several erythematous fluctuant nodules varying in diameter on the presternal region and multiple fistulas discharging a seropurulent fluid on the left inguinal region (Figure 3). In addition, diffuse desquamation on the lower extremities, plantar hyperkeratosis and dystrophic changes on the nails were seen.

The direct microscopic examination of seropurulent material from draining sinuses showed septated hyphae and spores. The samples obtained from the scaly patches and the nails revealed also fungal elements. In the cultures *Trichophyton rubrum* was isolated. The patient had been treated with oral itraconazole 200 mg daily for 10 weeks. At the end of therapy all lesions including nail dystrophies healed completely and mycologic cultures were negative.

DISCUSSION

Dermatophytes usually live on the keratin layer of the epidermis and other keratinous tissues, however they rarely invade deeper in the skin and may cause to a granulomatous reaction which is often named as Majocchi's granuloma or tinea profunda (1,2). This fungal granuloma is frequently seen on the shins or wrists. The most common cause of the disease is the inadvertent use of the potent topical steroids. In women, it may occur after shaving procedure of infected legs. In immunocompromised patients, granuloma and abscess formation due to dermatophytes may occur but, some cases with normal immunity have also been reported (3-8). The causative agent is often *T. rubrum* or *T. mentagrophytes* but other dermatophytes may also cause the disease (3, 4).

Currently there is no common agreement on nomenclature of the clinical pictures due to deeply situated dermatophytes, and to date, it has been used different names for the disease such as trichophytic granuloma, Majocchi's granuloma, deep tinea, deep generalized dermatophytosis, dermatophytic pseudomycetoma (4,5,7,8). Using the term "deep, generalized dermatophytosis" for our cases appears more reasonable than the others. In the treatment of the disease systemic antifungals are quite effective (2,3,9). Griseofulvin and itraconazole were used for the treatment in our cases. No side effect was seen with both drugs. But itraconazole was more effective and improvement of the lesions was obtained in a shorter period. With itraconazole all lesions including dystrophic nails cleared in the second case while in the first patient who had used griseofulvin for totally 12 months the nails were still deformed.

Itraconazole, a dioxolane triazole compound, is a lipophilic and keratophilic agent. Therefore it can remain up to 1 month in the skin and for 6 to 9 months in the nails at therapeutic levels after cessation of therapy (9,10). In the management of the patients with deep generalized dermatophytosis, using the systemic antifungals such as itraconazole which has a high activity against a broad spectrum of pathogenic fungi including dermatophytes, yeasts and some molds seems to be better than griseofulvin.

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