

Oral Terbinafine in the Treatment of Griseofulvin-resistant *Tinea capitis et faciei et corporis* in a 10-month-old Girl

Sir,

Tinea capitis occurs worldwide. It is primarily a disease of childhood but in most cases oral therapy is necessary (1). Currently, triazoles and allylamines are increasingly applied in addition to the well-known antimycotics ketoconazole and griseofulvin (2–4). Terbinafin is the first oral active allylamine, and although it has been available for several years experience in children is limited. We report a case of *Trichophyton mentagrophytes*-induced *tinea capitis et faciei et corporis* in a 10-month-old girl who promptly responded to oral terbinafine.

CASE REPORT

Six weeks before admission to our hospital, a 10-month-old girl developed several red-coloured, slightly scaling seats on the trunk and face and one lesion on the capillitium. Despite systemic treatment with oral griseofulvin (10 mg/kg/day over 4 weeks), and topical treatment with cyclopiroxolamine, the lesion on the capillitium spread, accompanied by progressively developing pustules and hair loss. Postauricular and cervical lymphadenopathy was present. On examination, we found a kerion-like clinical presentation on the head and superficial *tinea faciei et corporis*. We identified *Trichophyton mentagrophytes*. Systemic antimycotic treatment was changed. During systemic therapy with terbinafin (62.5 mg per day over 4 weeks) the cutaneous lesions disappeared. Eight weeks after initiation of the terbinafin therapy we observed only some degree of postinflammatory hyperpigmentation on the capillitium and face. The lesions on the trunk had completely disappeared. Three months later a circumscribed alopecia was still present. No side effects were noted during systemic terbinafine therapy.

DISCUSSION

Dermatophytes often cause *superficial* cutaneous diseases. However, under certain circumstances and in special regions, like the scalp, *deep* dermatophytosis can develop due to *T. violaceum*, *T. rubrum*, *T. schoenleinii*, *T. tonsurans*, *T. mentagrophytes*, *T. verrucosum* and *Microsporon* spp. (4). Topical therapy is ineffective in *tinea capitis* since penetration of antimycotics is limited and they rarely appear in the bulbar region (1, 3). Therefore, systemic therapy is recommendable.

Griseofulvin has long been the only antimycotic agent for systemic therapy in dermatophytoses (1). However, a number of patients do not respond and extended duration of therapy leads to problems in compliance and/or unwanted side effects (1, 2, 6). Terbinafin – the first orally active allylamine – has been available for a couple of years now. It has a fungicidal activity against many species, especially dermatophytes (5), and its penetration into sebum and hair is explained by its lipophilic quality. The drug is only slowly released from hair and skin

glands (4), which may explain the efficacy even in short-term therapy (6, 7). Many studies in adults have shown high response rates and good tolerability in *tinea corporis* and onychomycosis (3).

Experience with terbinafin treatment of mycoses is limited in children. There have been only a few open studies and case reports which show a good tolerability and high response rates (73–100%), especially in *tinea capitis* (4, 6, 7). However, *Microsporum canis* infection may cause some problems (8, 9). Side effects are rare and mostly mild. Recommended daily dosages for paediatric patients are 250 mg (>40 kg body weight), 125 mg (20–40 kg body weight) and 62.5 mg (<20 kg body weight) (1, 3, 6, 7).

In our case of a very young child, tolerability, clinical and mycological response of terbinafin therapy were excellent. Controlled studies are necessary to answer questions concerning dose and duration of terbinafin therapy and to exclude drug-related side effects in children.

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