

Oral Terbinafine for Tinea Capitis due to *Microsporium Canis* in Children

Sir,

We studied the efficacy and side effects of terbinafine, an effective treatment for most fungal infections (1–3), in 36 children aged 2–10 years with tinea capitis due to *Microsporium canis*. The diagnoses were confirmed clinically by green fluorescence under Wood's lamp and by microscopy and culture results.

Terbinafine was prescribed at recommended doses (62.5 mg for children weighing <20 kg and 125 mg for children weighing >20 kg). The treatment was given for a total of 6–8 weeks. In addition to this regime, 1% terbinafine cream was applied twice daily to all infected lesions. Every 2–4 weeks all patients were evaluated for clinical cure using Wood's light, microscopy and culture. At a total of 2 centres, 24 patients were observed for 12 weeks and 12 for 24 weeks. Those who were not cured after 8 weeks of treatment and were still infected after 24 weeks were prescribed oral griseofulvin (221 mg/kg/day). Blood and serological liver function tests were performed before and after treatment. Cure was defined as regrowth of hair, no green fluorescence under Wood's lamp and negative microscopy and cultures on 3 consecutive occasions at 4-weekly intervals.

RESULTS

After 4 weeks of treatment there was still mycological evidence of fungus in 67% of children and after 12 weeks 44% were still not cured. In 12 of these children (7 with 1 focus and 5 with >1 focus on hair and skin) observation was prolonged, with mycological tests being performed every 4 weeks. These tests were negative in all but 1 child after 24 weeks. The children's mothers were asked about their children's general state of health and the occurrence of headache, nausea and diarrhoea. None of these 12 children experienced any side effects associated with the terbinafine tablets. Local treatment with 1% terbinafine cream caused an irritation of the foci with the appearance of pustules in 5 of the 12 children and consequently 1% fucidine cream was administered for 2–4 weeks. Liver enzymes and bilirubin levels were not elevated for any patient after 4–6 weeks of treatment. Three children had an elevated eosinophil level and 4 children had an elevated platelet count.

DISCUSSION

Although Nejjam et al. (4) concluded that tinea capitis in children can be cured within 56 days, it has been observed

that treatment of fungal infections caused by *M. canis* can take longer to treat than other fungal infections and is not always effective (256). Peharda et al. (7) found that 21.5% of children treated for 2 months with terbinafine were not cured and Silm et al. (8) reported that, after 12 weeks, 39 of 82 patients treated with oral and local terbinafine were not cured. As noted by others (12), local treatment with 1% terbinafine cream can cause exacerbations.

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