Microsporum audouini Causing Tinea Capitis in Black Children

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SUMMARY

Microsporum audouini was cultivated from 75% of 44 cases of tinea capitis occurring in Tsolo District of the Transkei; this was surprising, since previous reports have indicated the rarity of M. audouini in South Africa.

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Many medical visitors come to St Lucy's Hospital in the course of a year, even though it is in a mountainous district 16 km from the nearest village, and sharing of medical knowledge takes place. One such visitor, in January 1973, was Dr Ulbrich of Michigan, who came with a party of American medical practitioners who were on a tour of South Africa. He was struck by the number of cases of tinea capitis that were seen during his visit, for scalp ringworm, sometimes covering almost the entire scalp, (witkop) is common among Transkeian children. When I confessed ignorance of the causative fungus he took specimens of hair from the scalps of 2 children back to the USA with him. His interest was further aroused when Microsporum audouini (form langeronii, the African form) was cultured from them; he stated that, as far as he knew, this fungus had not been reported in Southern Africa, although it was common in the Belgian Congo.1

Marshall² states, 'In South Africa Trichophyton violaceum is the common parasite in the Cape Province, but not in the Transvaal, where M. canis is most often found.' He also states that M. audouini (S. langeronii) commonly attacks the scalp in the Congo and that Microsporum infections there are most frequent in low-lying country. the trichophytoses being in the mountains, but adds that the reverse is true in South Africa.² The rarity of M. audouini was confirmed by Professor Scott from the University of the Orange Free State, who stated, 'In our experience M. audouini is rare in South Africa. We usually see about one or two cases a year. M. canis is very common in Whites, and T. violaceum is the usual cause of tinea capitis in the Bantu." He and his staff kindly under-

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TABLE I. POSITIVE RESULTS ON CULTURE

Microsporum	audouini only	 	 	 	31
	violaceum only				
M. audouini	+ T. violaceum	 	 	 	2

In other words, M. audouini was present in 75% of the cases in which positive results were obtained. Rather more males than females were affected (20 males and 13 females), and the age distribution is noteworthy (Table II).

TABLE II. AGE DISTRIBUTION

No of cases	1 - 3 yrs	4 - 7 yrs	8 - 13 yrs		
M. audouini	14	13	6		
T. violaceum	7	3	1		

Thus, for both fungi, children under the age of 3 years accounted for about 50% of the positive cases, and over 80% were under the age of 7 years. The response to treatment with griseofulvin 250 mg daily for a month appeared to be satisfactory in all cases that could be followed up.

It is interesting to note that M. audouini was not cultured from a single sample by the Public Health Laboratory Service in the UK during 1972, the vast majority being T. rubrum. However, just over 25 years ago, M. audouini was isolated from 80% of children with ringworm of the scalp.4 Perhaps its ready response to treatment accounted for its disappearance in the UK and its rarity elsewhere in South Africa.

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