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Tinea Versicolor and Body Lotions

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Abstract. A woman complained she had caught her 'white spots' from an American sun lotion. The daughter also had them. The mother's spots showed malassezia furfur. The daughter, by a curious coincidence, had developed vitiligo at the same time. As a comfort it was agreed that the sun lotion should be examined for fungal contamination.

Scrapings from lesions of patients with tinea versicolor show a typical appearance of malassezia furfur. Roberts (9) cultured specimens from 27 patients and isolated *Pityrosporum orbiculare* in 25.

Pityrosporum orbiculare is a yeast-like organism requiring lipids for growth. Morphologically it is distinct from *Pityrosporum ovale* (2, 7). They are both found as members of the normal skin flora, *Pityrosporum ovale* especially on the scalp, *Pityrosporum orbiculare* especially on the trunk (8).

Malassezia furfur and *Pityrosporum orbiculare* are considered to be identical organisms. The hyphal elements of malassezia furfur are the result of a yeast—mycelial transformation. *Pityrosporum orbiculare* thus becomes pathogenic when it changes from a yeast to a filamentous habitat (1, 3, 6).

Tinea versicolor is extremely common in many tropical and subtropical areas (5, 9) and has been reported in over 40% among adults and adolescents in Western Samoa (4). Marples (5) suggests that the habit of greasing the skin with coconut oil might be responsible for this very high prevalence.

Roberts (9) discusses the factors influencing the transition of *Pityrosporum orbiculare* from yeast to filamentous form. Host susceptibility is considered important, but possibly some strains of *Pityrosporum orbiculare* tend to form filaments in vivo, thus becoming capable of causing tinea versicolor.

The story told by our patient raised the question of whether tinea versicolor is promoted by body lotions and creams used as sun screens or emollients.

MATERIALS AND METHODS

All cultures were made from scrapings from patients with clinical and microscopically verified tinea versicolor. Cultures were performed on Sabauraud agar (Difco) with an added layer of the sun lotion as such and with each of the ingredients of the lotion provided by the manufacturer.

RESULTS

Cultures from the sun lotion revealed no growth of fungi. All other results are given in Table I.

COMMENTS

In spite of the paraben added for preservation (0.3%) the sun lotion helped the growth of *Pityrosporum orbiculare*. This finding together with Marples' observations from Western Samoa supported the patient's assumption that a sun lotion could cause tinea versicolor. Information gained by questioning of further patients with curious features of tinea versicolor seems to support the conjecture. A

Table I. *The growth of Pityosporum orbiculare from scrapings from patients with tinea versicolor*

Sabouraud agar with addition of	Growth of *Pityosporum orbiculare* +	−
Sun lotion	2	11
Cocoa butter	5	11
Sesame oil	5	5
Eight other ingredients of the sun lotion[a]	0	10
Coconut oil	8	10

[a] Ethylene-diglycol, liquid paraffin, glycerylaminobenzoate, Comperlan KD (mixture of ethanolamides of coconut acid). Butylhydroxy anisole, Triethanol amine, propaloid T., stearin.

man, 26 years, had had constant recurrence of tinea versicolor since 1973—always localized to the abdomen only, and always recurring after treatment. His wife had ichthyosis and used cream every day—and she also proved to have tiny spots of tinea versicolor.

In some cases application of creams also explains the occurrence of tinea versicolor in areas with few sebaceous glands, such as the elbow flexures and genital folds.

The purpose of this paper has not been to present new data related to the growth of *Pityosporum orbiculare* on different lipid constituents of body lotions, but to call clinicians' attention to a possible relationship between recurrent tinea versicolor and the use of body lotions.

The problem could be solved by the use of vaseline or lotions not containing fatty acids, which stimulate the growth of *Pityosporum orbiculare* (7).

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Nail–Patella Syndrome Associated with Renal Failure Requiring Transplantation

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Abstract. The nail–patella syndrome is a rare, inheritable disease of the connective tissue in which multiple osseous abnormalities are associated with dysplasia of the nails. Renal dysfunction is found in 25–42% of cases and varies from asymptomatic proteinuria to renal failure. This paper describes a patient with nail–patella syndrome and terminal renal disease requiring transplantation.

Key words: Nail–patella syndrome; Terminal renal disease; Renal transplantation

The nail–patella syndrome or hereditary osteo-onycho-dysplasia is a rare, inheritable, autosomal dominant disease of the connective tissue. The principal manifestations include nail dysplasia, skeletal deformities involving the elbow joint, iliac horns and hypoplasia or a plasia of the patellae. Renal dysfunction has been found in 25–42% of reported cases (2, 9) and most frequently presents as asymptomatic proteinuria. However, terminal renal disease has also been reported (3, 8, 10).

This paper presents a patient with nail–patella syndrome associated with renal failure requiring transplantation.