

Familial Pityriasis Versicolor

SALIH HAMAD MOHAMAD ALJABRE, MSc, PhD, DAMMAM, SAUDI ARABIA. ASSISTANT PROFESSOR, DEPARTMENT OF DERMATOLOGY, KING FAISAL UNIVERSITY, DAMMAM, SAUDI ARABIA. CONSULTANT DERMATOLOGIST, KING FAHAD HOSPITAL OF THE UNIVERSITY, AL KHOBAR, SAUDI ARABIA.

From: Department of Dermatology, King Faisal University, Dammam, Saudi Arabia

SUMMARY

Many factors are known to predispose to pityriasis versicolor but little is documented about its familial occurrence. One hundred patients of pityriasis versicolor were investigated for instances of familial and conjugal cases. While no conjugal cases were found among seventy-one married patients, seven were blood relatives. These findings suggest that genetic predisposition and/or transmission from person to person might be functional in the pathogenesis of pityriasis versicolor.

Introduction

Pityriasis versicolor is a superficial infection of the skin characterized by scaly macular lesions. It has a world-wide distribution but it is especially common in tropical areas.¹ In normal skin, the pathogen exists in yeast forms but in the lesions there is additionally hyphae. The factors involved in the pathogenic conversion of this fungus are not fully clear and little is documented about its familial occurrence.

Patients and Methods

One hundred prospective cases of pityriasis versicolor were studied. The diagnosis was confirmed by the golden yellow fluorescence of lesions with Wood's lamp and the observation of bunches of yeast and hyphae on direct

potassium hydroxide microscopic examination of scales obtained from the lesions. The following data were analyzed: marital status, family history of pityriasis versicolor, and predisposing factors.

Results

The age of the patients ranged from 8 - 62 years (average 29.6 year). Females were 19 and males 81. Seven patients were relatives; father and a son of the age of eight years, two brothers age 11 and 13 years, and a father and his 17 and 15-year-old sons. None of these seven patients had systemic or other cutaneous diseases, and they were not on immunosuppressive drugs. Seventy-one patients were married but none of their spouses had a positive present or past history of pityriasis versicolor.

Discussion

Certain environmental conditions and diseases are known to predispose to pityriasis versicolor. These include: hot humid climate, occlusive dressings, sweating, Cushing's disease, malnutrition, immunosuppression, pregnancy, diabetes mellitus, and ichthyosis.²⁻¹⁰ Application of oil to skin is also thought to be a factor contributing to the increased incidence of this disease in the tropics.³

Although pityriasis versicolor has been investigated in different parts of the world, its familial occurrence has been reported less often,^{4,5} and nothing is mentioned about this in our part of the world.

The present study showed that out of one hundred patients of pityriasis versicolor, seven were blood relatives pointing either to a hereditary predisposition or spread from person to person. The absence of conjugal cases that had been reported only rarely^{4,5} favors the former possibility. Hereditary predisposition to fungal diseases is seen in tinea imbricata. The latter is caused by the dermatophyte *Trichophyton concentricum* seen in southern Asia, South Pacific islands and Central and South America where it mainly affects the native peoples.¹¹ Other races living in the same areas normally do not develop this infection. The susceptibility to it is thought to be transmitted as an autosomal recessive character.¹²

References

1. OLUMDIE YM, ODUNOWO BD, ODIASE AO. Depigmentation in black African patients. *Int J Dermatol* 1990; 29:166-174.
2. BORELLI D. Epidemiology, ecology and treatment pityriasis versicolor in Latin America (Venezuela). In: Meinhof W (ed). *Oral therapy in dermatomycoses: a step forward. Proceeding of a symposium.* Oxford: The Medicine publishing Foundation, 1985; 111-117.
3. FARGEMANN J & FREDRIKSON T. Tinea versicolor: Some new aspect on etiology, pathogenesis and treatment. *Int J Dermatol* 1982; 21:8-11.
4. BURKE RC. Tinea versicolor. Susceptibility factors and experimental infections in human beings. *J Invest Dermatol* 1961; 36:398-402.
5. ROBERTS SOB. Pityriasis versicolor: A clinical and mycological investigation. 1969; 81:315-326.
6. BOARDMAN CR, MALKINSON FD. Tinea versicolor in steroid treated patients.. *Arch Dermatol* 1962; 85:44-52.
7. BUCKHART CG ET AL. An unusual case of tinea versicolor in an immunosuppressed patient. *Cutis* 1981; 27:56.
8. KLOTZ SA. *Malassezia furfur.* *Infect Dis Clin North Am.* 1989; 3:53.
9. BORELLI D, JACOBS PH, NALL L. Tinea versicolor: Epidemiologic, clinical and therapeutic aspects. *J Am Acad Dermatol* 1991; 25:300-305.
10. FAERGEMANN J, FREDRIKSON T. Tinea versicolor with regard to seborrheic dermatitis: An epidemiologic investigation. 1979; 115:966-968.
11. HAY RJ. *Tinea imbricata. Current topic in medical mycology.* New York: Springer Verlag. 1987; 2:5-72.
12. SERJEANSTON S, LAWRENCE G. Autosomal recessive inheritance of susceptibility to Tinea imbricata. *Lancet* 1977; 1:13-15.

Correspondence:

Dr. Salih H. M. Aljabre
P.O.Box 10011
Dammam 31433
Saudi Arabia.