

PITYRIASIS VERSICOLOR IN CHILDREN

A K Miskeen, S S Kelkar and H J Shroff

A six-year survey revealed 132 cases of pityriasis versicolor in children below 10 years of age. This constituted 6.7% of all cases of pityriasis versicolor and 24.8% of cutaneous fungus infections seen in this age-group. A peculiar presentation was lesions on the face in 16 infants, and achromic scaly lesions on the thighs and legs in 43 cases in the age-group 1 to 5 years. A majority (71.2%) of the cases were seen during the moist hot months of May to October. There were fewer cases during the dry cooler months from November to March.

Key words : Pityriasis versicolor, Children.

Pityriasis versicolor is common in the postpubertal age when the sebaceous glands are active,¹ and in individuals who sweat more.² It is now established that *Malassezia furfur* is the mycelial form of *P. orbiculare*,³ and appears when there is a build up of this otherwise normal inhabitant of the skin together with a shift from the yeast to the mycelial form.^{4,5} High ambient temperatures with a high relative humidity predispose. The custom of taking 'oil baths'—application of oil to the skin before bathing—also accounts for the higher incidence of the disease.⁶ Literature indicates the rarity of cases in children upto 10 years, especially in the temperate climates, and paucity of data from the tropics.⁷ We are reporting data on 132 cases of the condition in children below 10 years of age seen during the last six years.

Materials and Methods

All cases were diagnosed on the basis of clinical criteria and confirmed by examination with wood's light and demonstration of the organism in the scrapings in 10% KOH. Whenever in doubt, the scrapings were examined again.

From the Departments of Dermatology and Microbiology, Grant Medical College and J. J. Group of Hospitals, Bombay-440 008, India.

Address correspondence to : Dr. A. K. Miskeen

Results

A total of 132 cases were encountered during 6 years, forming 6.7% of all cases of pityriasis versicolor seen during this period. There were 79 males and 53 females, the majority being in the age-group of one to five years (Table 1). More cases were seen in the warmer and humid months from May to October (Fig. 1). The relative humidity in Bombay during the rainy season from June to September varies from 80 to 95%, and ambient temperatures are quite high. All the cases were from the lower and middle socio-economic groups. Most of the patients gave history of excessive sweating. Some patients complained of mild pruritus especially when the lesions were present on the covered areas. The duration of infection in all cases was less than a year. A history of pityriasis versicolor in family members was obtained in nine cases.

Table I. Age and sex of the 132 cases of pityriasis versicolor in children below 10 years.

Age (Years)	Sex		Total	Percentage
	Male	Female		
0-1	14	8	22	16.6
1-5	42	30	72	54.5
5-10	23	15	38	28.9
Total	79	53	132	100.0

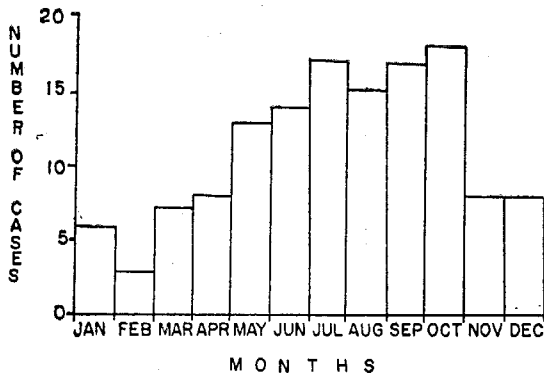


Fig. 1. Seasonal occurrence of cures of pityriasis versicolor.

The site of skin involvement is shown in table II. The clinical appearance was characteristic: discrete, achromic macules with some scaling. Thirteen cases had extensive involvement with lesions on the neck, shoulders and back but even in these, there was no merging of adjacent lesions. In addition, 6 cases had miliaria rubra, 4 had dermatophytosis, and 3 had impetigo contagiosa.

Table II. Pattern of distribution of lesions in 132 cases of pityriasis versicolor in children.

Anatomic site	Sex		Total	Percentage
	Male	Female		
Thigh	26	23	49	37.1
Face	25	13	38	28.8
Arm	13	3	16	12.1
Chest	5	6	11	8.3
Neck, back and shoulder	5	2	7	5.3
Back and shoulder	2	4	6	4.5
Abdominal wall	3	2	5	3.9
	79	53	132	100.0

Brown fluorescence with Wood's lamp was seen in 109 cases. This was prominent in recent cases. In 23 children, there was no fluorescence.

Comments

The present report suggests that pityriasis versicolor is not an uncommon disease in paediatric dermatology. This condition should not be overlooked because of the age. In terms of cutaneous fungus infections it accounted for 24.8% of the cases of this category in children under 10 years of age.

Smith and Gallerman⁹ expected a high incidence of pityriasis versicolor in the tropics. A previous report suggested that it accounted for as much as 40% of skin infections in children.¹⁰ Jelliffe and Jacobson⁸ described the condition in Negro infants. The common sites of involvement were perineum, groins, gluteal region and face. Two recent reports of this disease in India described one case out of 100 cases of pityriasis versicolor seen in Kerala,¹¹ and 18 cases below the age of 10 years in a series of 687 cases at Madras.⁶

There was a marked increase in the number of cases during the rainy and hot months followed by a sudden fall during the cooler and drier months of November, December and January. None of the cases had any associated systemic disease.

Lesions on the face were seen in as many as 15 of the 20 cases in infants in contrast with the rarity of pityriasis versicolor on the face in adults.^{12,13} The majority of cases seen in this study in the age-group one to five years showed the lesions on the thighs and the legs. This is an unusual site of involvement in adults but has been described in infants.⁸

On microscopic examination, filamentous forms of the fungus were observed more often than spherical "meat-ball" forms in contrast to the situation in adults where both spherical and filamentous forms occur in more or less equal proportions. Similar observations were made by Michalowski and Rodziewicz.⁷

References

1. Faergemann J : Tinea versicolor and *Pityrosporum orbiculare* : Mycological investigations, experimental infections and epidemiological surveys, Acta Dermatol Venereol (Suppl), 1979; 86 : 1-23.
2. Abdul Razack MA and Thambiah AS : A clinical study of pityriasis versicolor in Madras, Sabouraudia, 1977; 15 : 305:311.
3. Gordon MA : *Malassezia (Pityrosporum) pachydermatis* (Wiedman) Dodge 1935, Sabouraudia, 1979; 17 : 305-309.
4. Burke RC : Tinea versicolor : Susceptibility factors and experimental infection in human beings, J Invest Dermatol, 1961; 36 : 389-402.
5. Roberts SOB and Mackenzie DWR : Mycology, in Textbook of Dermatology, 3rd Ed. Editors Rook A, Wilkinson DS and Ebling FJG, Blackwell Sci Publ, Oxford, 1979; p 767-868.
6. Kamalam A and Thambiah AS : A study of 3,891 cases of mycoses in the tropics, Sabouraudia, 1976; 14 : 129-148.
7. Michalowski R and Rodziewicz H : Pityriasis versicolor in children, Brit J Dermatol, 1963; 75 : 379-400
8. Jelliffe DB and Jacobson FW : The clinical picture of tinea versicolor in Negro infants, J Trop Med Hyg, 1954; 57 : 290-293.
9. Smith EB and Gallerman GL : Tinea versicolor in infancy, Arch Dermatol, 1966; 93 : 362-363.
10. Vanbreuseghem R : Un probleme de mycologie medicale : le pityriasis versicolor, Ann Inst Pasteur, 1950; 79 : 798-801.
11. Amma MS : Clinical and epidemiological studies on tinea versicolor in Kerala, Ind J Dermatol Venereol Leprol, 1978; 44 : 345-351.
12. Bumgarner PE and Burke RC : Pityriasis versicolor, atypical clinical and mycologic variation, Arch Dermatol, 1949; 59 : 192-195.
13. Roberts SOB : Pityriasis versicolor—A clinical and mycological investigation, Brit J Dermatol, 1969; 81 : 315-326.