CLINICAL PATTERN OF PITYRIASIS VERSICOLOR

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Pityriasis versicolor, a very superficial fungus infection as it is classified, is said to present a varied clinical picture. It is observed that the picture of this disease is different at different climatic conditions.

The present paper is aimed at analysing clinical features of Pityriasis versicolor in a place like Banaras (India) with hot and humid climate in summer months.

MATERIAL AND METHODS

All the patients attending the out patients department with the complaints of hypopigmented or hyperpigmented patches were thoroughly scrutinized and diagnosis established by direct KOH examination. One hundred successive unselected cases of pityriasis versicolor were the subject of study. The clinical examination was particularly directed towards the study of site of lesions, discoloration of the site involved and its relation to the complexion of individual, any accompanying symptoms and its association with any other disease.

RESULTS

Sex ratio was 80 males to 20 females. Only five per cent of the patients were below 14 years of age and the youngest was 11 years old. The lesions in this child were present on cheeks and forehead and only one lesion was present on front of chest.

Sites of involvement (Table 1) – The commonest site of involvement was pectoral regions, being present in 66% in this series, The other common sites being front of sternum, face, scapulae and interscapular region. Face alone was involved in 14% of cases. In two of the five Patients below the age of 14 years, face was the only site of involvement. Axillae were involved in 18% of cases. Two types of lesions were noticed in axillae. One in which there is diffuse involvement with imperceptible borders. This type of lesion occurred in 10 patients. These were associated with hyperhiderosis of axillae. In other 8 patients the lesions in axillae were well demarcated and areas in between these lesions showed normal skin (Fig. 1).

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Received for Publication on 17-1-1966.

TABLE I—SITES OF INVOLVEMENT

Site	Total cases with involvement	Only site involved
Axillae	18	—
Face	50	14
Back of ears	14	—
Angle of jaw	4	—
Neck	38	4
Front of sternum	58	3
Pectoral region	66	1
Scapulae	46	—
Interscapular region	46	—
Abdomen	14	—
Lower back	16	—
Arms	30	3
Forearms and elbows	16	—
Thighs	16	—
Legs	8	
Hands	2	
Feet	2	

RELATION OF COMPLEXION TO DISCOLORATION

Complexion of individuals were classified arbitrarily as dark + +, dark +, wheetish, fair +, and fair + +. Table 2 shows the total number of patients belonging to each category and the number of cases with hypopigmented and hyperpigmented lesions respectively.

TABLE 2

RELATION OF DISCOLORATION OF LESIONS TO COMPLEXION OF INDIVIDUAL

Complexion	Total No.	Hypopigmented	Hyperpigmented
Dark + +	12	8	4
Dark +	38	34	4
Wheetish	32	30	2
Fair +	10	8	2
Fair + +	8	8	—

ASSOCIATION WITH SYMPTOMS

Itching of varying degree was present in 29% of the cases. Itching was present only on involved parts of the skin in 8% of the cases while in 21% the itching was present both on involved and univolved parts of skin.

TABLE 3— ASSOCIATION WITH SYMPTOMS

Itching and paraesthesias	29 cases
i) Mild itching	20 cases
Moderate to severe itching	29 cases
ii) Itching on exposure to sun or with perspiration	14 cases
Nocturnal itching	7 cases
Not related	8 cases

ASSOCIATION WITH OTHER DISEASES

Tinea cruris was present in 25% of the cases at the time of examination and 5% of the patient gave a history of this disease in the immediate past. Association with other diseases was not significant, being infective hepatitis (1) Congestive heart failure (1) Scabies (1) and urticaria (1).

DISCUSSION

Higher incidence in males is in conformity with other authors (Kazyskalowicz, 1928 and Duk, 1962). The lower incidence in females may not be very true as those females may not be coming to us for treatment in which lesions are limited to covered parts.

The incidence of Pityriasis versicolor in children is very low in our series (5%). Many more children might be harbouring the fungus showing no visible lesions by daylight, but which could have been only revealed by Wood's light as had been observed by Michalowski & Rodziewicz (1963). These authors had reported this disease for the first time to be very frequent in children in temporate climates, but none of their cases had lesions on face. Involvement of face is very rare in wester countries (Becker & Obermayer, 1947 and Ingram & Brain, 1957).

Upper part of the chest and back are common denominators as the site of involvement in any series anywhere. Submaxillary portion is usually involved (Ingram & Brain, 1957) but axillae are said to remain free. In our series 18% of the patients had axillary involvement. Hands and feet are said to be practically never involved (Backer & Obermayer, 1947), but in two of our cases these sites were involved in addition to other regions of body. In 21% of our cases the only sites of involvement were those which are otherwise also considered to be rare viz. face, neck, forearms and elbows, which is significant.

Discoloration produced by the lesions had been variously described as hypopigmented, fawn, cafe-au-laite to dark brown and even black. It is generally said that those individuals who have darker complexion have hypopigmented lesions but those with fairer complexion have relatively darker discoloration of lesion. The present series of patients did not show any relationship between complesion and discoloration. The hypopigmentation of lesions had been attributed by lewis & Hooper (1943) to be not due to any biological interference with the pigmentary mechanism but caused by mechanical screening effect of the scales. This theory of sunscreening effect of scales

cannot alone explain the cause of hypopigmentation on covered parts of skin which are not exposed to sunlight. According to Schimdt (1956) hypopigmentation is due to inhibition of oxidative processes concerned in pigment formation due to partial destruction of thiamine and riboflavin in the skin by sunlight. But we feel that fungus cannot affect the pigment formation directly as it does not penetrate deeper than stratum corneum. We would rather believe that difference of colour produced by Mallessizia furfur infection in different individuals is due to different variant of this fungus infecting different individuals. Hypopigmentation left over in many cases after mycological cure is probably the result of chemical interaction of end products of fungus and cells of stratum corneum which is producing this hypopigmentation. This process, however, might be inhibited by factors of vitamin B complex, as it had been observed by us that those patients in which large doses of vitamin B complex were given in addition to usual local therapy, return of pigment was quicker.

High incidence of tinea cruris in association with pityriasis versicolor is significant. It shows common predisposing factors like high temperature and humidity in both these disorder.

Itching and paraesthesia was seen in 29% of cases, out of which 21% had it even on unaffected parts, which throws doubt on its causal relationship. But such a high percentage of association cannot also be disregarded merely as a coincidence. Susceptibility to this infection in different persons may be due to a basis chemical or physiological change in the skin or its secretions has been suggested in recent studies (Mackenna & Cohen, 1964). The same basic change in skin all over body may explain itching on unaffected parts of individual rather than fungus itself or its products which do not reach the nerve endings.

SUMMARY

One hundred cases of pityriasis versicolor are studied with regard to variations in clinical pattern observed. It has been tried to put up explanations to some of these variations.

ACKNOWLEDGEMENTS

Thanks are due to Dr. K. N. Udupa, Superintendent, Sir Sunder Lal Hospital and Principal, College of Medical Sciences, Banaras Hindu University, for his kindness to permit us to publish this report.

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