

One-year Review of Pityriasis Rosea at the National Skin Centre, Singapore

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Abstract

Pityriasis rosea is a common, acute, self-limited papulosquamous eruption of possible viral aetiology. The aim of this study was to describe the profile of pityriasis rosea seen at a referral skin centre in Singapore.

A retrospective chart review was conducted of all the patients with a diagnosis of pityriasis rosea seen during 1996. There were 368 patients; their ages ranged from 9 months to 82 years with a peak in the 20 to 29 years age group. There were slightly more males (1.2:1). The clinic incidence was 6.5 per 1000 cases. No ethnic predilection was noted and cases were seen evenly throughout the year. About a quarter of the patients gave a history of a viral infection shortly before or during the occurrence of the rash.

Most cases had a typical truncal distribution. The herald patch was observed in 63 patients (17%). Inverse distribution involving mainly the extremities were seen in 22 cases (6%) and eczematized lesions were noted in 20 cases (5.4%). The two main differential diagnoses considered were tinea infection and secondary syphilis. A fungal scrape and a rapid plasma reagin test were done in 58 and 59 patients, respectively, and the results were negative. Treatment was symptomatic and consisted of topical steroids and antihistamines. Thirty patients (8%) were given oral prednisolone for extensive eruptions.

The pattern of pityriasis rosea in Singapore is similar to that reported in other countries except for a male predominance and absence of monthly variation. A lower incidence and an older group of patients were also seen in our series as compared to African patients.

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Key words: Clinical pattern, Epidemiology, Self-limiting, Viral infection

Introduction

Pityriasis rosea is a common, self-limited disorder of unknown but suspected viral aetiology, that develops abruptly with few or no prodromal symptoms. Classically, the first sign is the presence of a single lesion, 2 to 5 cm in diameter known as a "herald patch". This shows central clearing with peripheral scaling, followed a few days later by crops of lesions appearing over the trunk and proximal limbs, following the lines of skin cleavage. Individual lesions are oval and pink with a fine peripheral collarette scale. Itching may occur and the eruption fades spontaneously in 6 to 8 weeks. Recently, the human herpes virus 7 has been implicated to play a causative role in pityriasis rosea.¹

Atypical variants of pityriasis rosea may occur.² The herald patch may be missing or present as the sole manifestation of the disease. The eruption may be predominantly peripheral involving the extremities (inversa) or localised to the face, axillae and groins. Lesions may be eczematized and weepy, vesiculobullous, urticarial, purpuric or resemble erythema multiforme.

Most of the epidemiologic data on pityriasis rosea

have been based on the Western and African population with little information among Asians.³⁻⁵

Patients and Methods

This is a retrospective study of patients with pityriasis rosea who were seen at the National Skin Centre, a national referral skin centre between January 1996 and December 1996. The diagnosis was made by a dermatologist based on clinical grounds. In cases clinically resembling other conditions, appropriate tests were done to exclude them. Demographic data, pattern and distribution of the rash, seasonal variation, differential diagnoses and treatment were collated from patients' case records.

Results

A total of 368 cases of pityriasis rosea were identified. During this period, 56,514 new patients with skin diseases attended the National Skin Centre, giving a clinic incidence of 6.5 per 1000 cases. Of the 368 cases, 200 were males and 168 females (ratio: 1.2:1). Their ages ranged from 9 months to 82 years with a peak (36%) in the 20 to 29 years age group (Fig. 1). The next most frequent age

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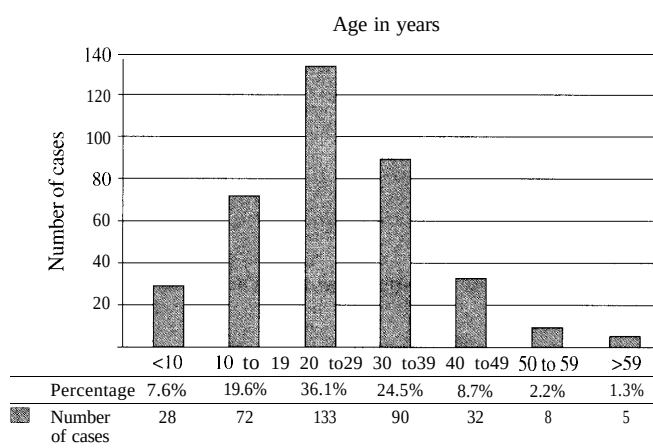


Fig. 1. Age distribution of 368 Asian patients with pityriasis rosea.

group affected was in the 30 to 39 years age group (24.5%) followed by the 10 to 19 years age group (19.6%). Twenty-eight patients (7.6%) were below 10 years of age and 45 patients (12%) were above the age of 40. 76.1% were Chinese, 9% Malays, 10% Indians and 4.9% Others. This was comparable to the racial composition of the general dermatological patients attending the National Skin Centre during this period (80% Chinese, 6.2% Malays, 7.5% Indians and 6.3% Others).

The number of cases was equal all year round (Fig. 2). About a quarter of the patients gave a history of a viral infection such as fever, running nose, sore throat or cough shortly before or during the occurrence of the rash. No household concurrence within the same family was noted. In the majority of cases, truncal distribution characteristic of the condition was seen. The face was involved in 14 cases (4%), the axilla in 14 cases (4%), the hands in 11 cases (3%) and the feet in 11 cases (3%). The herald patch was observed in 63 patients (17%), usually on the trunk, upper arm or thigh. Predominantly inverse distribution of pityriasis rosea involving mainly the

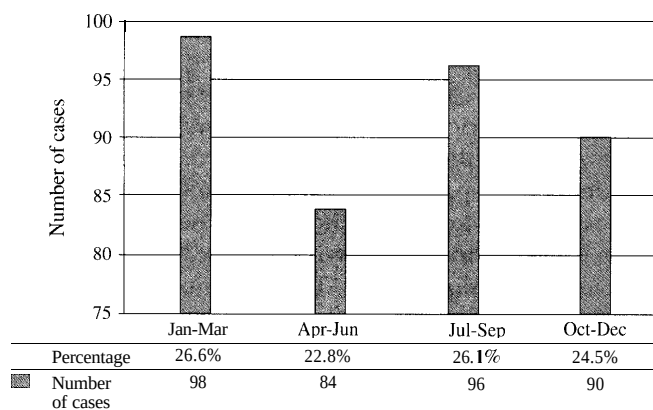


Fig. 2. Distribution of pityriasis rosea cases.

extremities was seen in 22 cases (6%). Inflamed, eczematized lesions were noted in 20 cases (5.4%). There was no relationship between the age of patients and the localisation or morphology of the lesions.

The two main differential diagnoses considered were tinea infection and secondary syphilis. A fungal scrape was done in 58 patients (15.8%) and a rapid plasma reagin test/treponema pallidum haemagglutination test was done in 59 patients (16%) and these were all negative. All patients complained of itch. Treatment was symptomatic and consisted of topical steroids and antihistamines. Thirty patients (8%) were given oral prednisolone for more extensive eruptions, especially when the lesions were eczematized.

Discussion

Pityriasis rosea has been reported in all races with most studies showing a slight female predominance (1.2 to 1.5:1).³⁻⁵ In our study, there was a slight but definite male predominance (1.2:1). The incidence of pityriasis rosea in our series was 0.65%. This is lower than studies in African countries (2.4% to 4.8%)^{4,5} but similar to European and North American figures (0.3% to 1%).⁶ The median age range in our series was 20 to 29 years with a peak incidence in the 20 to 29 years age group. This is similar to a study in Rochester, Minnesota where the median age was 22 years with a peak incidence in the 20 to 24 years age group.⁷ Patients from Lagos, Nigeria were younger with a median age of 15 to 19 years and a peak incidence in the 10 to 14 years age group.⁵

Pityriasis rosea has been reported to be more common in colder months than in the warmer season³ and more common in the rainy season.⁵ No monthly variation was noted in our series. The affliction of a young, non-immune age group (children and young adults), the rarity of recurrent cases and the presence of a mild leukopenia with relative lymphocytosis in some patients⁵ suggest a viral aetiology. About a quarter of our patients gave a history of a viral infection preceding or during the occurrence of the rash. This was similar to the Rochester study where a fifth of the patients had acute infections shortly before the onset of pityriasis rosea.³ Recently, the human herpes virus 7 was detected in the skin, peripheral blood mononuclear cells and in plasma of pityriasis rosea patients. It has been suggested that pityriasis rosea may be a clinical manifestation of human herpes virus 7 reactivation.¹

Differential diagnoses of pityriasis rosea include guttate psoriasis, tinea infection, secondary syphilis and drug eruptions. The main differential diagnoses considered in our patients were tinea infection and secondary syphilis. In the early stages, the herald patch may be mistaken for tinea corporis and if the lesions are extensive and involve the palms and soles, secondary syphilis has to be excluded. None of our 117 patients, in whom

investigations were done, had any evidence of tinea infection or secondary syphilis.

Twenty of our cases had inflamed eczematized pityriasis rosea. These lesions tend to be extensive and extremely pruritic and many of the patients were atopic. All these patients were treated with a short-tailing course of prednisolone over two to three weeks with improvement. Although systemic steroids have been advocated for severe generalised cases,⁷ exacerbation and worsening with an increase in both pruritus and the extent of lesions have been reported.⁸ This suggests that caution should be used in prescribing systemic steroids for pityriasis rosea. It remains to be seen whether the use of systemic steroids will lead to more frequent recurrences due to the viral aetiology of the condition.

Conclusion

The profile of pityriasis rosea in Singapore is similar to that reported in other countries except for a male pre-

dominance and absence of monthly variation. Our patients too tended to be older compared to those reported from Africa.

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