

## Original Research Article

# Clinical profile of pityriasis rosea: a descriptive study from urban Karnataka

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## ABSTRACT

**Background:** Pityriasis rosea (PR) is common, self-limited papulo-squamous dermatosis of unknown origin, which mainly appears in adolescents and young adults (10-35 years). It has a sudden onset, and in its typical presentation, the eruption is preceded by a solitary patch termed “herald patch”, mainly located on the trunk. The objective of the study was to assess the clinical profile of pityriasis rosea.

**Methods:** The data was collected from patients attending the Department of Dermatology, Basaveshwar Teaching and General Hospital attached to Mahadevappa Rampure Medical College, Gulbarga. It is a descriptive observational study. A total 79 patients suffering from pityriasis rosea who attended the outpatient department were included in the present study during the period from 2006 to 2007.

**Results:** Out of 79 patients studied, majority were from 11-20 years age group 33 (41.8%) followed by 27.8% from 21-30 years age group. The mean age of study population was found to be 21.3±6.4 years. 11% gave history of acne vulgaris, 8% each had history of atopy and drugs. Commonly observed prodromal symptoms were URTI (25.3%) and fever (17.7%). Herald patch was seen on trunk in majority of patients i.e. 36 (61%) followed by 18.6% cases on upper extremity and on neck (8.5%).

**Conclusions:** Our study concludes that pityriasis is common in 11-20 years age group with male predominance having URTI as common prodromal symptom and typical rash.

**Keywords:** Pityriasis rosea, Rash, Clinical profile

## INTRODUCTION

Pityriasis rosea (PR) is common, self-limited papulo-squamous dermatosis of unknown origin, which mainly appears in adolescents and young adults (10-35 years). Slightly more common in females. It has a sudden onset, and in its typical presentation, the eruption is preceded by a solitary patch termed “herald patch”, mainly located on the trunk. Few days later, a secondary eruption appears, with little pink, oval macules, with a grayish peripheral scaling collarette around them. The secondary lesions adopt a characteristic distribution along the cleavage lines of the trunk, with a configuration of a

“Christmas tree”. In most cases, the eruption lasts for 6 to 8 wk. Its incidence has been estimated to be 0.68% of dermatologic patients, varying from 0.39% to 4.8%.<sup>1-3</sup>

The exact cause of the disease is not known till date. Natural history of the disease suggests that it has an infectious origin. Various reports have suggested possible links between PR and bacterial, viral or mycoplasmal infections, insect bite, auto immune disease, isomorphic response and psychogenic cause.<sup>3</sup> Watanabe et al stated that there is a long held belief that PR is a viral exanthem.<sup>4</sup> So we conducted this study in order to assess the clinical scenario of PR cases in urban Karnataka.

**Objective**

Objective of our study is to assess the clinical profile and complications of PR.

**METHODS**

The data was collected from patients attending the Department of Dermatology, Basaveshwar Teaching and General Hospital attached to Mahadevappa Rampure Medical College, Gulbarga. It is a descriptive observational study. A total 79 patients suffering from PR who attended the outpatient department were included in the present study during the period from 2006 to 2007.

Written consent was taken from patients who were included in the study. Each patient was subjected to a detailed review of clinical history and a complete physical examination including the skin as outlined in the proforma. History of illness regarding onset, evolution, duration, symptoms, systemic features, recurrence, and associated factors such as history of drug intake, along with clinical presentation, was recorded in the proforma. Detailed information regarding preceding history of

fever, cough, throat pain, nasal discharge and drug intake. Particular emphasis was given to the duration of lesions, site of onset, presence of herald patch, secondary eruption, progress of the lesions, probable precipitating factors like drugs, new garments, and associated conditions like atopy, seborrhoeic dermatitis, acne vulgaris and pregnancy. The data thus collected entered in MS Excel sheet and statistical analysis was carried out by using SPSS 15.0 version. Data was expressed as percentages and mean value. Graphs were also drawn by using MS excel application.

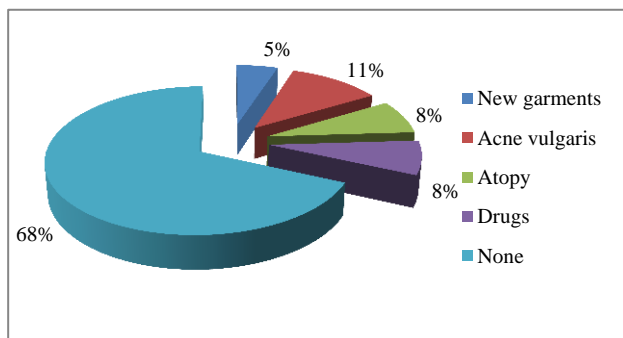
**RESULTS**

We included total 79 patients of PR in our study. Out of 79 patients studied, majority were from 11-20 years age group 33 (41.8%) followed by 27.8% from 21-30 years age group. The mean age of study population was found to be 21.3±6.4 years (Table 1).

In our study, there were 51 males (64.6%) and 28 females (34.6%). Majority of male and females were from 11-20 years age group i.e. 45.1% and 35.7% respectively.

**Table 1: Distribution of study population according to age and gender.**

	Age group in years	Males		Females		Total
		Frequency	Percentage (%)	Frequency	Percentage (%)	
	0-10	4	7.8	0	0.0	4
	11-20	23	45.1	10	35.7	33
	21-30	12	23.5	10	35.7	22
	31-40	7	13.7	4	14.3	11
	41-50	5	9.8	4	14.3	9
	Total	51	100.0	28	100.0	79



**Figure 1: Distribution of study population according to predisposing factors.**

Figure 1 shows that out of 79 patients, almost 25 had history of predisposing factors. 11% gave history of acne vulgaris, 8% each had history of atopy and drugs.

Commonly observed prodromal symptoms were URTI (25.3%) and fever (17.7%). Least observed were joint pain in 3.8%, headache in 2.5% and lymphadenopathy in 1.3% (Table 2).

**Table 2: Distribution according to prodromal symptoms.**

Prodromal symptoms	No. of cases	%
Fever	14	17.7
Joint pain	3	3.8
Swelling of lymph nodes	1	1.3
Upper respiratory tract symptoms	20	25.3
Headache	2	2.5

**Table 3: Site of Herald patch.**

Site of Herald patch	No. of cases	%
Face	3	5.1
Neck	5	8.5
Trunk	36	61.0
Upper extremities	11	18.6
Lower extremities	4	6.8
Total	59	100.0

Herald patch in our study was observed in 59 patients. Herald patch was seen on trunk in majority of patients i.e. 36 (61%) followed by 18.6% cases on upper extremity and on neck (8.5%) (Table 3).

**Table 4: Morphology of rash.**

	No. of cases	%
<b>Typical</b>	48	60.8
<b>Papular</b>	16	20.3
<b>Erythma multiforme</b>	4	5.1
<b>Eczematous</b>	11	13.9
<b>Total</b>	79	100.0

The rash observed in most of the patients was typical (60.8%). In 20.3% it was papular and in 13.9% it was eczematous (Table 4).

## DISCUSSION

### Age and gender

Out of 79 patients studied, majority were from 11-20 years age group 33 (41.8%) followed by 27.8% from 21-30 years age group. The mean age of study population was found to be 21.3±6.4 years.

Majority of the cases of PR reported between the ages of 10 and 35 years.<sup>6,7</sup> Our study findings are comparable with other studies with respect to peak age of incidence.<sup>4,7,8</sup>

In our study, 4 children had PR. PR is not uncommon in children. Cohen reported an incidence of 12.8% in children<sup>9</sup>

The overall male-to-female ratio is 1:1.5.<sup>7</sup> However, our study has shown a male preponderance. Ganguly in a clinic epidemiological study of PR from South India has also reported a male preponderance.<sup>10</sup>

### Prodromal symptoms

Commonly observed prodromal symptoms were URTI (25.3%) and fever (17.7%). Least observed were joint pain in 3.8%, headache in 2.5% and lymphadenopathy in 1.3%. Up to 69% of patients with PR have a prodromal illness before the herald patch appears.<sup>11</sup>

### Rash

In our study, the rash observed in most of the patients was typical (60.8%). In 20.3% it was papular and in 13.9% it was eczematous.

Pityriasis associated with erythma multiforme is a rare condition and few studies have stated about the same.<sup>12-15</sup>

## CONCLUSION

Our study concludes that pityriasis is common in 11-20 years age group with male predominance having URTI as common prodromal symptom and typical rash with trunk as predominant site of herald patch.

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