



THE CLINICOEPIDEMIOLOGICAL STUDY OF PITYRIASIS ROSEA AT TERTIARY HOSPITAL IN CENTRAL MAHARASHTRA

Dermatology

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ABSTRACT

Pityriasis Rosea, is a common disorder but less studied topic. The aim of the study was to study the age and the sex distribution, to determine the seasonal variations and the predisposing factors implicated in clinical course Pityriasis Rosea along with the common clinical presentations Pityriasis Rosea. 100 patients with clinical diagnosis of pityriasis roses were included in the study. Maximum number of patients 28 (28%) were in the age group of 21-30 years. Males 64 (64%) were more commonly affected than females 36 (36%) patients were females. Male to female ratio was 1.8:1. Pityriasis rosea was more common during winter season. Out of the 100 patients, 51 (51%) patients complained of itching. 53 patients had prodromal symptoms like URTI, fever or joint pain. 62% patients showed classical Pityriasis Rosea with presence of herald patch and trunk 42 (67.74%) was the most common site of Herald Patch. The secondary eruptions appeared in the second week after the appearance of Herald Patch in most of cases 27 (43.54%).

KEYWORDS

Pityriasis Rosea, herald patch, classical

INTRODUCTION

Pityriasis Rosea is an acute, mild, self-limiting, papulosquamous disorder, probably infective in origin, characterized by distinctive skin eruption and minimal constitutional symptoms. The approximate incidence of Pityriasis Rosea (PR) in general population is 0.5–2%.¹ It affects people of both sexes in 15–30 years age group although also seen in elderly and children.

Pityriasis Rosea typically starts with the development of a patch known as Herald patch or Mother patch. It is a large, solitary erythematous scaly plaque on trunk or neck. Other sites include back, neck, abdomen & extremities. The Herald patch is followed by appearance of secondary eruptions. Secondary eruptions are multiple small erythematous scaly lesions located predominantly on the trunk and following the lines of cleavage on the back (Christmas tree or inverted fir tree appearance). Here typical collarette scaling is seen. The secondary eruptions usually appear within a period of 2 days to 2 months after the appearance of Herald patch. These secondary eruptions are usually preceded by a prodrome of sore throat, gastrointestinal disturbance, fever, and arthralgia.

The exact cause of the disease is still not known. Numerous hypotheses have been postulated about the exact cause of PR, incriminating both infective agents such as viruses, bacteria, spirochetes, and noninfective etiologies such as atopy and autoimmunity.² There are few reports evaluating the role of streptococcus in Pityriasis Rosea as it (PR) is usually preceded by an upper respiratory tract infection. HHV7 and HHV8 are also implicated in the pathogenesis of Pityriasis Rosea. Pityriasis Rosea cases occur more frequently during winter season. The precipitating factors of Pityriasis Rosea are pregnancy, medications, seborrheic dermatitis & atopy.

Though Pityriasis Rosea is a common condition which can be easily diagnosed and managed, at times it poses difficulties in diagnosis in everyday practice due to atypical presentation. It can have significant impact on the patient's quality of life. Very few Indian studies are available on Pityriasis Rosea though it is common in India.

The present study was undertaken with an aim to estimate clinical and epidemiological features and different clinical presentations of Pityriasis Rosea.

MATERIALS AND METHODS

The data for present study was obtained from the patients attending the Outpatient department of the Department of Dermatology, Venereology and Leprosy, JIIU'S Indian Institute of Medical Science and Research (IIMSR), Warudi, district Jalna, State Maharashtra One hundred (100) patients with clinical diagnosis of Pityriasis Rosea who

attended the outpatient department and were willing to be a part of the study during the period of January 2017 to December 2017 were included in the present study. The study was approved by the ethical committee of the Institute. Written informed consent was taken from all patients who were included in the study.

Each patient was subjected to a detailed clinical history and a complete physical examination including the examination of skin as outlined in the proforma.

Relevant information regarding preceding history of fever, cough, throat pain, nasal discharge, joint pain, drug intake and history of similar complains in other family members was obtained. Particular emphasis was given to the duration of the lesions, site of onset, presence of herald patch, secondary eruptions, progress of the lesions, probable precipitating factors like drugs, use of new garments by the patient.

Detailed dermatological examination was conducted and morphology and distribution of the lesions were observed. Oral mucosa, genitalia and nails were also examined and the findings were noted. Systemic examination was done in all the patients to find out any associated disease.

RESULTS

One hundred patients with clinical diagnosis of Pityriasis Rosea were studied. Following are the results and observations made from the study.

Table 1: Age Wise Distribution Of Pityriasis Rosea

Age in years	Number of Patients
11 yrs-20 yrs	27
21 yrs-30 yrs	28
31 yrs-40 yrs	11
41 yrs-50 yrs	6
51 yrs-60 yrs	8
61 yrs-70 yrs	6
Total	100

In this clinical study of Pityriasis Rosea, the mean age in the males was 28.1 years and that of females was 26.31 years. Maximum number of patients 28 (28%) were seen in the age group of 21-30 years followed by 27 (27%) patients were in the age group of 11-20 years and the minimum were in the age group of 61-70 years. Our youngest patient was a 4 year male child while oldest was a 65 year female.

In the present study out of 100 cases, 64 (64%) patients were males and 36 (36%) patients were females. Male to female ratio was 1.8:1.

Table 2: Month Wise Distribution Of Pityriasis Rosea

Month	Percentage
January	11
February	4
March	6
April	9
May	7
June	6
July	7
August	8
September	7
October	10
November	13
December	12
Total	100

In this study, maximum cases were seen in the months of November (13%) followed by December (12%) i.e. during winter season.

10(10%) patients gave the history of wearing new garments before the onset of the illness. No precipitating factor was noted in 90 (90%) patients.

Table 3: Incidence And Severity Of Itching In Pityriasis Rosea

Pruritus	Percentage
No pruritus	49%
Mild Pruritus	34%
Moderate Pruritus	11%
Severe Pruritus	6%
Total	100%

Out of the 100 patients, 51 (51%) patients had varying degrees of itching. However 49 (49%) patients had no itching at all.

Table 4: Prodromal Symptoms

Prodromal Symptoms	Number of Cases
Fever	12
Joint Pains	3
Upper Respiratory Tract Infection	38
None	47
Total	100

47 patients had no prodromal symptoms. 38 patients had history of upper respiratory tract infection prior to the onset of the illness. 12 patients had history of fever whilst only 3 patients had history of joint pains.

Out of the 100 patients, 62 patients showed classical Pityriasis Rosea with presence of herald patch, while 38 patients had atypical presentation. Further analysis of patients with atypical presentation revealed herald patch was absent in 30 cases, 5 cases were having papular lesions while 3 were having eczematous lesions.

Table 5: Site Of The Herald Patch

Site of Herald Patch	Number of Cases	Percentage
Face	0	0
Neck	0	0
Trunk	42	67.74
Upper extremities	13	20.96
Lower extremities	07	11.29
Total	62	100

Out of the total 100 patients, 62 had Herald Patch. Among them 42 (67.74%) patients had trunk as the site of Herald Patch. 13 (20.96%) patients had Herald Patch on the upper extremity while only 7 (11.29%) had on the lower extremity. No Herald Patch was observed on the face or neck.

Out of 62 patients with Herald patch, 27 (43.54%) cases developed the secondary eruptions in the second week and 22 (35.48%) cases within first week after the appearance of Herald Patch.

Table 6: Distribution Of Secondary Eruption In Pityriasis Rosea

Site of Secondary Eruption	Number of Cases
Face	0
Trunk	20
Trunk & Extremities	58

Trunk, Neck and Extremities	6
Extremities	14
Lower Extremities only	2
Total	100

In the present study, secondary eruptions of Pityriasis Rosea were noted on trunk and extremities in 58 (58%) cases. In 20 (20%) patients trunk was the only site of involvement. 14 (14%) patients had the eruptions on the extremities. Trunk, neck and extremities involvement was seen in 6 (6%) cases. 2 (2%) cases had lesions on the lower extremities only.

DISCUSSION

Though Pityriasis Rosea is common disease, it is less studied, especially in the Indian setup. The present study evaluated clinical profile of 100 patients with clinical diagnosis of Pityriasis Rosea. In this study the age of the patients ranged from 4 years to 65 years. Majority of the patients of Pityriasis Rosea were reported between the ages of 11 and 30 years. This result of present study is consistent with the finding of most reports that young adults are the most frequently affected by Rosea.^{3,4}

In the literature, the youngest patient was 3 months old and the oldest was 83 years of age.⁵ In this study youngest patient was 4 years old and oldest was of 65 years of age. Pityriasis Rosea is not uncommon in children. The incidence of Pityriasis Rosea in children less than 4 years was 4% and 45% in patients less than 19 years of age.⁶ In the present study 14 patients were below the age of 10 years.

Our study showed male preponderance with male to female ratio 1.8:1. This was similar to earlier reports by Ganguly S et al and Chhabra N et al.^{3,4} However few investigators have reported higher female to male ratio.⁷

Conflicting results were reported for seasonal variation in Pityriasis Rosea. A higher incidence in winter was reported by investigators in England and United States. A bimodal distribution was reported in Brazil and Singapore. Other studies reported no seasonal variation.⁸ In this study Pityriasis Rosea was more common during the winter season (i.e., November to February), it was around 40%. Lower incidence 24% was reported in the summer season. It was consistent with findings of Sharma et al.⁹

Use of new garments or old garments in storage for prolonged period have been suggested as precipitating factors for Pityriasis Rosea.¹⁰ In the present study (10%) patients gave the history of wearing new garments before the onset of the illness. No precipitating factor was noted in 90 (90%) patients.

Pruritus may or may not be present in this disease. Pityriasis Rosea irritate is a variant in which patient presents with extreme itching, especially on contact with sweat and thus has multiple excoriations over the body.¹¹ In present study out of the 100 patients, 51 (51%) patients had varying degrees of itching. Kambil in his study observed itching in about two third of the patients.¹²

Prodromal symptoms frequently reported with Pityriasis Rosea are malaise, nausea, loss of appetite, headache, difficulty in concentration, irritability, gastrointestinal and upper respiratory tract symptoms (up to 69%), joint pain lymphadenopathy and mild fever.¹³ In this study, history of preceding upper respiratory tract infection was noted in 38 (38%) of the cases. History of URTI was noted in 17.5% of patients by Sharma et al.⁹ Prodromal symptoms prior to the onset of PR were reported in 65% of patients by Sharma et al while in our study 53% of patients had prodromal symptoms.⁹

The incidence of the herald patch varies to a great extent, from 40-76% in various studies.⁸ In our study, 62% had herald patch as the most common presentation of Pityriasis Rosea. Herald patch was observed in approximately 92% of patients of Pityriasis Rosea by Ganguly and in 78% of patients by Kambil.^{4,12}

Atypical variants of Pityriasis Rosea are rare and were observed in only 20% of cases.¹¹ Pityriasis Rosea can be atypical with respect to morphology, size, distribution, number, site and course of disease.¹⁴ The various atypical morphological types include vesicular, purpuric, urticarial, generalized papular, lichenoid, erythrodermic and erythema multiforme like Pityriasis Rosea. In our study, we have

observed atypical morphology of lesions in 38% of patients.

Bjornberg had observed that the herald patch was commonly seen on the trunk, in areas covered by the clothing but it sometimes occurred on the neck or extremities.¹⁵ In the present study, trunk was most common site of involvement in 29 (69%) cases, followed by extremities in 13 (31%) cases. This supports Bjornberg's and Drago's observation.^{13,15}

In most of the studies, the secondary eruptions appeared at an interval of 7-14 days after the appearance of the herald patch. In the present study, in 32 patients the secondary eruptions appeared within the first two weeks of the appearance of the herald patch.

Parsons et al reported that the site of the secondary eruptions was mainly on the trunk, extremities and neck.² In the present study, trunk and extremities were common site of involvement in 58 (58%) cases followed by the trunk in 20 (20%) cases and the extremities in 14 (14%) cases.

CONCLUSION

In the present study most of the cases were having features of classical Pityriasis Rosea. It was more commonly seen in the second and the third decade of life. A slight male preponderance was seen. It was more common during the winter season. Prodromal symptoms were noted before the appearance of rash in patients. Upper respiratory tract infections preceded the appearance of rash in most patients. Some of the cases were observed after wearing new garments. Mild to moderate degree of itching was present. The distribution of lesions was mainly on the trunk and upper arms i.e., centripetal distribution. Typical presentation of Pityriasis Rosea was the commonest. Herald patch was present in most of the cases. The common site of the herald patch was on the trunk followed by the extremities. The secondary eruption appeared after an interval of 1-2 weeks of the herald patch. Trunk and extremities were the most common sites for the secondary eruptions.

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