

THE INCIDENCE AND CLINICAL ASPECTS OF PITYRIASIS ROSEA GIBERT

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Abstract

Pityriasis Rosea Gibert is an acute dermatologic affliction characterized by scale-like rashes localized on the body and arm pits, which appears depending on the seasons, mostly in the spring and fall, with spontaneous healing. It is seen in young people with equal repartition between the sexes. This paper proposes to underline some clinical aspects and the apparition of changes in disease incidence.

The study was realized on a group of 35 patients, with ages between 10 and 67 years old, based on anamnesis data and dermatologic clinical exam.

The study results show the presence of clinical variants and atypical forms of the disease, the incidental modification covering the gender distribution, changes of seasonal variation, and the increase of occurrence age. The results underline also correlations between disease apparition and decreased immunity, association with chronic diseases and pregnancy.

In conclusion, pityriasis rosea is seen frequently at young people and lately there has been an increase in occurrence of this disease on older people. A change among gender distribution was noticed, being encountered mainly in the women population. Atypical and other clinical variants which deviate from the classical schematic of lesion distribution, like a Christmas tree distribution of lesions, have been encountered more and more during these past years.

Key words: (maximum 6): pityriasis rosea, mother plaque, scales, pruritus

INTRODUCTION

Described by Gibert in 1860, Pityriasis Rosea Gibert is an acute inflammatory dermatological affliction manifested through an eruption with scale-like lesions that are self-limited and with spontaneous healing.

Disease incidence displays seasonal variations, being frequently seen in the cold season, especially in the spring and fall, affecting equally both sexes and represents approximately 1-2% of all dermatological consults. Young people with ages between 10 and 35 years old are especially afflicted, both healthy subjects and even more the ones with decreased immunity.

There have been multiple cases of disease appearance within families, but also micro-epidemics in children social groups. The disease is not contagious and it rarely affects newborns, babies or aged persons.

Disease etiology is not known even though multiple research has been done on the subject, there are only several theories.



Fig. 1 – Example of Pityriasis Rosea Gibert (rash dissemination on the back of the patient)

Microbial infectious etiology with known germs: streptococcus, staphylococcus is supported by seasonal variations of the disease and its apparition in the form of small scale epidemics.

For the viral etiology there are other supporting data, like observations done with the electronic microscope of the picornavirus. Other data support infections with the Echo6 virus, parainfluenza type I, II and III. Recent studies associate disease apparition with the reactivation of the human hepatic virus, strains 6, 7 and β -herpes viruses. In disease triggering there are a series of favoring factors: stress, atopic state, decreased immunity, pregnancy, acute respiratory infections.

Pityriasis rosea is debuting in 80% of the cases through a macula or unique plaque, which is erythematous and round to oval in shape, looking like a medallion, also named initial plaque, “mother” plaque, heraldic plaque, Brock plaque or primary medallion, and in most of the cases it is located on the trunk, in the armpits or on the back. It has dimensions between 2-7cm, sometimes reaching 10cm. The contour of the plaque is erythematous, bright red, but as the disease evolves the center becomes paler with a tendency to heal, but the contour is more embossed and erythematous. In the center, the plaque is covered by a fine scale, and on the margins there’s a collaret scale.

The secondary eruption show up in eruptive bouts at 1-2 weeks from the apparition of the initial plaque and its characterized by lesions like the “mother” plaque, oval in shape with a diameter ranging from 1 to maximum 2cm, pink or yellow-pink in color. In the center there are fine scales and on the sides there’s the collaret scale. They have a symmetric localization, on

the body, upper and lower chest, on the neck, upper armpits, rarely on the abdomen, forearms and calf.

Typical to the eruption is the characteristic “Christmas Tree”-like distribution of the lesions, which are layered around the cleavage skin areas. The lesions can be isolated or congregated under a circle like aspect.

In some cases the eruption is preceded or seen together with fever, headaches or digestive issues. Subjectively the eruption can be seen together with discrete or moderate rashes, only 25% of the patients complaining about intense rashes. It heals spontaneously, in approximately 4-8 weeks, rarely is it seen for 12 weeks or more, and in these cases a skin biopsy is necessary to eliminate the case of parapsoriasis.

In addition to its typical form of pityriasis rosea described until now, there are also other clinical variants met more rarely like:

- the form with a hive-like aspect;
- the vesicular form, with grouped vesicles or papulo-vesicles;
- the purpuric form;
- the monomorphic form made only from medallion type lesions.

In addition to all these clinical variants there are also atypical forms of pityriasis rosea, rarely seen:

- a clinical form with lesions spread only on the face and neck;
- pityriasis rosea inversed with localizations on the face and also distally on the extremities, a shape more frequently met at children;
- a shape which is characterized only through the presence of the initial plaque, without any other lesions;
- an atypical shape with the presence of more than one initial plaques;
- an oral shape, which afflicts the oral mucosa through lesions like patches, hemorrhagic points, vesicles, bubbles, ulcerations.
- an atypical unilateral shape when the eruptive lesion do not exceed the median limit and are much larger in dimension.
- Pityriasis circinat and marginal Vidal, rare and seen only in adults. It has an axillary and inguinal localization with eruptions under the shape of large plaques in low numbers.

Pityriasis rosea is not contagious and relapses are rare, up to 2%. It rarely has any complications.

Not all cases require treatment, pityriasis rosea having the tendency to spontaneously heal. Generally it is indicated to avoid hot and frequent showers, irritating soaps and wool based clothing or synthetic fibers. It is recommended to wash using oil or shower gels which are gently moisturizing. Locally to calm the rashes it is recommended lotions or mixtures anti-rashes with menthol or topic corticoids.

Systemic treatment is indicated only in intense and acute forms, with intense or extended rashes and in the eczema causing cases. Anti-histaminic

based drugs are recommended, sedatives and tranquilizers to calm the rashes and short cures with corticoids.

Therapy with UVB is also recommended because it diminishes rashes. Some specialists recommending early administration of acyclovir.

MATERIAL AND METHOD

Starting from studies which have tracked data from pityriasis rosea concerning incidence, clinical manifestations and evolution, we have realized this study with the purpose of pointing out changes in the incidence and clinical aspects of Pityriasis Rosea, on a sample range of patients diagnosed with this disease in a Dermatology practice office located in a Private Medical Center in Oradea

The study was done on a lot of 35 patients with ages between 10 and 67 years old, over the span of 2 years, starting from 1 September 2015 until 1 September 2017. The study lot encompassed 12 male patients and 23 female patients, the latter group including a pregnancy.

Positive diagnosis of the disease was determined based on anamnestic data, symptomatology and clinical dermatological exam, having evaluated the following parameters: Age, sex, acute infection presence, prodromal symptom presence, the existence of favoring factors (heat, sweat, irritating clothing), presence of eczema complications, associated chronic diseases.

Clinical dermatological exam checked for: presence or absence of initial plaque, shape, dimension, color and its localization; the time period length from initial apparition of plaque and the secondary eruption; aspect, dimension, color and presence of scale-like secondary eruptive elements; localization of eruptive lesions; presence and intensity of rashes; existence of eczema complications; the season in which the disease surfaced.

RESULTS AND DISSCUSIONS

RESULTS

Following our study on a number of 35 patients, of both genders and different ages, we've tracked the incidence evolution and clinical manifestations of pityriasis rosea. Age group and gender repartition can be seen in table 1.

Table 1

| Pityriasis Rosea case repartition based on age groups, age and gender | | | | | |
|---|-------------|-----------------|----------------|-------------------|---------------------|
| Nr. Crt. | Age group | Number of cases | Percentage (%) | Nr. of male cases | Nr. of female cases |
| 1 | 10-19 years | 6 | 17.1% | 2 | 4 |
| 2 | 20-29 years | 13 | 37.1% | 4 | 9 |
| 3 | 30-39 years | 15 | 42.8% | 5 | 10 |

| | | | | | |
|---|-------------|---|-------|---|---|
| 4 | 40-49 years | - | 0 | - | - |
| 5 | 50-59 years | - | 0 | - | - |
| 6 | 60-69 years | 1 | 2.08% | 1 | - |

The results show a larger number of patients from the female population, respectively 23, compared with the male patients group numbering a total of 12.

Based on age groups, the study results point out a disease presence of 42.8% for the age group of 30-39 years old; 37.1% for the age group of 20-29 years old; 17.1% for the age group of 10-19 years old and 2.08% for the age group of 60-69 years old, more exactly a 67 year old patient.

Considering the presence of prodromal symptoms and acute respiratory infections with bacteria and viruses, we've concluded that 60% of the patients have associated the presence of the disease with prodromal symptoms or respiratory infections.

In 31.4% of the cases, favoring factors were present: "mother" plaque was seen at 30 of the patients, representing 85.7%, for 27 of these it was localized on the chest and armpits; for 2 cases, the initial plaque was localized on the back and for 1 patient on his arm. In all the 85.7% of the cases, the plaque dimension did not exceed 7cm. The time interval between the "mother" plaque apparition and the secondary eruption did not exceed 15 days, where it was present. Its characteristic spread, in the shape of a "Christmas tree", was seen in all 85.7% of the patients.

A monomorphic eruption with lesions in the shape of medallion and localization mainly around the back area of the body was seen in 1 case.

Localization of scale-like rashes on the arms was seen in 1 case and a trichotie aspect-like eruption in another case.

Considering complications like the eczematous lesions, the results point out the presence of it in 4 patients, with a percentage of 11.4%. 2 cases for the age group of 10-19 years old, 1 case in the 60-69 age group and one case in the 30-39 age group.

Study results have shown that 25% of the cases display intense rashes, and in 4 patients, 11.4%, did not show any signs of rashes.

Disease incidence for the number of dermatological check-ups in the practice during the first decade of the study, 1 September 2015 – 31 August 2016 was at 2.10% and in the second decade, 1 September 2016 – 1 September 2017 was at 2.34%.

From disease incidence based on seasonal changes, the study results show an increased incidence of the disease during the cold season, especially in the spring and fall, and additionally, we've noticed an incidence increase of the disease in the warm season, during the summer. The study results indicate a percentage of 31.1%, 11 cases in the spring;

28.5%, 10 cases in the fall; 22.8%, 8 cases in the winter and 17.1%, 6 cases in the summer.

Seasonal variations of the Pityriasis Rosea incidence are shown in graph nr. 1.

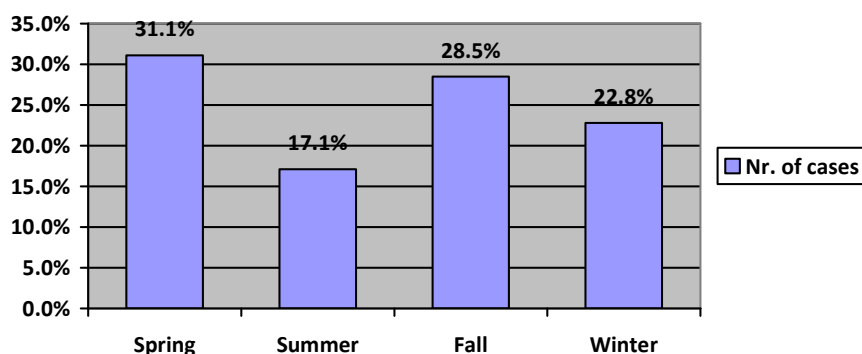


Fig. 2 - Seasonal variations of Pityriasis Rosea Gibert cases

Cases with disease recurrence have not been recorded.

DISCUSSIONS

Pityriasis Rosea Gibert is an acute dermatitis with self-limited character, seasonal and with spontaneous healing.

Even if it's usually seen in patients with ages between 10 and 35 years old, latest data from the literature show an increase of its superior threshold, up to 43-45 years old, an aspect notice in our study as well, where we've acknowledged the presence of this affliction in 39 year old patients. Numerous studies have shown that it is highly unlikely to be seen in older ages, however we've encountered on a 67 year old patient, which proves it's occurrence in elderly subjects.

Considering its seasonal incidence, the study results show an increase of incidence during the warm season, the summer, keeping in mind that during the summer, pityriasis is extremely rare. Study results show a percentage of 17.1% of the patients being diagnosed with pityriasis rosea during the warm season, the summer.

Generally, the study indicates an increase of disease incidence from 2.1% to 2.34% in the second decade of the study when compared to data available up until now, where the incidence rate was between 1 and 2% out of the total clinical observations.

From a clinically point of view, looking outside the typical clinical panel of the disease, which was seen in 85.7% of the patients, other atypical forms have also been noticed like monomorphic lesions in the form of

medallions localized mainly on the back of the patient, in a 20 years old patient; a tricoftie form in a young male patient; a form which had its localization mainly around the arm area for a 10 year old child; and an extended lesion area over the abdomen, arms and inferior limbs in an older patient of 67 years old. Their presence is in concordance with literature data which mention the presence of atypical forms and other clinical variants of pityriasis rosea.

Extended pruritus was seen in 25% of the cases, especially for patients whom have also shown eczemas. The eczema of the lesions is considered a complication, and was present in 11.4% of the cases, mainly extreme groups like children and the 67 year old elder.

Low immunity, especially for the elderly patient, the children and a pregnant woman was also a favoring factor for disease apparition, which comes to confirm the idea of disease occurrence in patients with diminished immunity.

Association with other chronic diseases like cardiac diseases, example seen for the elderly patient, digestive issues, the atopic terrain cause the disease incidence to grow for these persons, the symptomatology and clinical manifestations to be more noticeable. Disease association with acute respiratory infections was seen in 60% of the cases from this study, another item which comes to confirm this aspect in many other studies conducted up until now.

Disease evolution under specific treatment and individualized, where it was deemed necessary, depending on age, clinical shape, rash intensity and lesion eczema, was favorable overall. No relapse was registered, and none of the patients had the disease previously.

From the study we can conclude that the female sex is most affected, the number of recorded case taking 65.7% of the total of patients, an aspect which is seen in other recent published studies.

CONCLUSIONS

- 1) Pityriasis Rosea Gibert is an acute disease with seasonal character, spring and fall, and spontaneous healing.
- 2) The study points out the increase of disease incidence and its apparition in people over 35 years old and even the elderly.
- 3) There's a higher disease incidence for the female sex.
- 4) There's a growing incidence during the warm season, in the summer.
- 5) The importance of correct diagnostic for the disease in atypical form identification or clinical variants for the purpose of detecting and implementing the correct therapy plan.

- 6) The presence of acute eruptive and intense forms with lesions characterized by intense rashes seen at patients with chronic diseases and associated with diminished immunity of the organism.
- 7) Spontaneous healing seen in most cases of pityriasis rosea cases.

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