DOI: 10.7241/ourd.20122.24

NASZA DERMATOLOGIA Online
OUR DERMATOLOGY Online

PITYRIASIS ROSEA IN 12-MONTHS-OLD INFANT

PITYRIASIS ROSEA U 12-MIESIĘCZNEGO NIEMOWLĘCIA

Piotr Brzezinski[1] Ahmad Thabit Sinjab[2]

[1]*Dermatological Clinic, 6th Military Support Unit, Ustka, Poland*
[2]*District Hospital in Wyrzysk a Limited Liability Company, Polnad*

Corresponding author: Dr Piotr Brzezinski *brzezoo77@yahoo.com*

Our Dermatol Online. 2012; 3(2): 119-122
Date of submission: 23.12.2011 / acceptance: 23.03.2012
Conflicts of interest: None

Abstract
Pityriasis Rosea (PR) is a self-limiting papulo-squamous disorder characterized in its typical form by sudden onset of a larger scaly plaque (herald plaque), followed by multiple, bilateral smaller scaly lesions of oval or round shape which follow Langer's lines of cleavage on the trunk and proximal parts of extremities.
Currently accepted hypothesis that the cause of this disease are human herpesvirus: HHV-6 and HHV-7.
Presented case of 12-months-old infant with the image of a pityriasis rosea.
PR is a common skin condition seen in children and adults. PR is rarely diagnosed in infants. It is important to distinguish it from other childhood exanthems.

Streszczenie
Łupież różowy (ŁR) jest ostrą, samoistnie ustępującą, grudkowo-złuszczającą chorobą, charakteryzującą się w typowej formie nagłym pojawieniem się najpierw dużej zmiany skórnej (blaszka macierzysta), a następnie wielu, mniejszych łuszczących się, owalnych lub okrągłych zmian skórnych, które występują wzdłuż linii cięcia Langera na tułowiu i proksymalnych częściach kończyn.
Obecnie przyjmuje się hipotezę, że przyczyną tego schorzenia są ludzkie wirusy opryszczki: HHV-6 i HHV-7.
Przedstawiono przypadek 12-miesięcznego niemowlęcia z obrazem łupieżu różowego.
ŁR jest częstym schorzeniem skóry u dzieci i dorosłych. ŁR u niemowląt jest rozpoznawany rzadko. Ważne jest, aby odróżnić go od innych wysypek wieku dziecięcego.

Key words: pityriasis roasea; infant; skin diseases
Słowa klucze: łupież różowy; niemowlę; choroby skóry

Introduction

Pityriasis Rosea (PR) described by Gibert in 1860 [1], but recognized as early as in 1798 by Willan [2].
PR may occur at any age, but most commonly between ages 10-35 years [3,4]. Pityriasis rosea can occur throughout the year, but more commonly is observed during the winter, spring and autumn months.
Female to male ratio is approximately equal [5] whereas in another study, it has been found to be 1.5:1 [6].
PR is a self-limiting papulo-squamous disorder characterized in its typical form by sudden onset of a larger scaly plaque (herald plaque), followed by multiple, bilateral smaller scaly lesions of oval or round shape which follow Langer's lines of cleavage on the trunk and proximal parts of extremities [3,7]. „Herald patch is oval, with rose, slighty elevated finely scaling borders whereas the center is paler and slighty depressed [7]. In about 50% the patch occurs on the limbs [7,8]. The appearance of other lesions (about 2 weeks later) is characterized by patches that are similar to the initial one, but are smaller and symmetrically oriented with their long axes along the cleavage lines („christmas tree" sign) [9].
Skin lesions usually lasts about 6 weeks [3,7,8].
PR in infants is hardly recognized, while in young children is the rarely seen and more often than in adults may be atypical, the location and morphology eruptions.

The aim of the work is to present the case of 12-month old infant with pityriasis rosea.

Case reports

Boy (I pregnancy, childbirth I), was born vaginally, according to Apgar score assessed at 10 points. The parents are young, unrelated. None of the parents are not burdened allergic diseases. Mother suffers from hypothyroidism. The boy to 6 months of age were fed naturally. Skin lesions occurred for the first time about 2 weeks for a visit to Clinic Dermatology.

Initially it was a oval erythematous-squamous lesions, gradually taking the shape of a slightly irregular, located on the trunk around the left axilla (Fig. 1). After about 7 days after the appearance of the first amendment, on the trunk began to occur oval patches with a diameter of 0.5 to 1.5 cm with peripheral scaling zone and a single small papules, also in part covered with scales (Fig. 2). This lesion gradually observed on the trunk, neck, upper limbs. A single lesions occupied thigh, but did not exceed the 1/3. Besides, the child was vital, fun (in good general condition). Histopathological study was not performed because the clinical picture lesions and the emergence of a few days earlier herald patches, which suggested the diagnosis of PR.

In the treatment applied emolients, local antihistamine and weakest glucocorticoids.

After about 6 weeks of outpatient treatment of skin lesions disappeared. A further three-year observation of the child showed no recurrence of skin lesions.

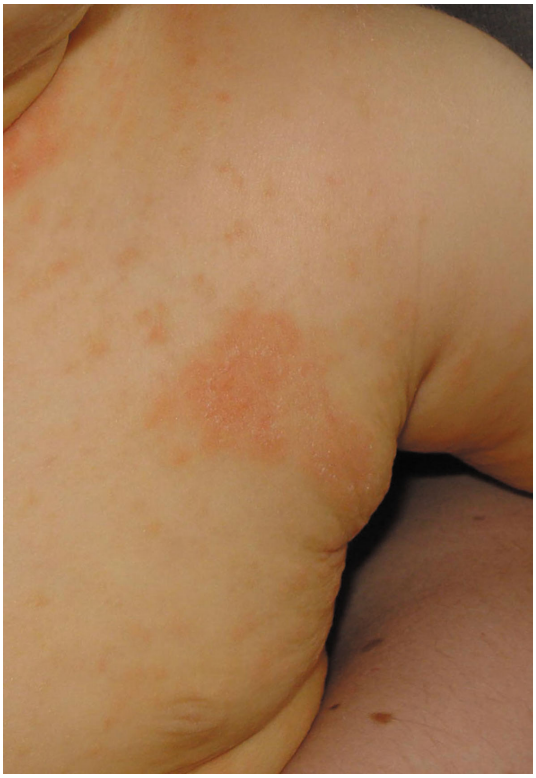

Figure 1. Pityriasis rosea – herald patche in the second week disease

Discussion

PR rarely been described in infants and young children. The nature of the changes, the location, the incidence of skin reactions (diseases) with allergic [10,11] and seborrheic dermatitis [12,13] in children mean that PR is almost not recognized and not included in the differentiation of skin eruptions in infants and young the children.

Traore et al. conducted a cross section study involving children from secondary school in Ouagadougou, Burkina Faso [14]. Thirty-six cases of PR were observed.

Pruritus was often observed with an inaugural lesion predominantly on the upper limbs and the trunk.

By Giam YC within 1 year in Middle Road Hospital in Singapur observed 0.1% (51) children with PR [15].

Several less common clinical presentations have been reported.

Have been identified atypical variance (localized variants limited to a small area, unilateral) in terms of morphology of lesions (vesicular, purpuric (haemorrhagic) urticarial, papular, erythema multiforme-like, ichenoid, pityriasis circinata et marginata of Vidal), size of lesions (gigantea of Darier) and site of lesions (flexural areas, face, mucosae, palms and soles, axilla, breast, eyelids, penis) [6,16-23].

A simple classification for atypic pityriasis rosea has been proposed by Chuh, et al [21].

Papular pityriasis rosea is more often seen in children. Numerous small papules 1-2 mm in diameter may be seen together with classical pityriasis rosea patches [21]. As in the present case.

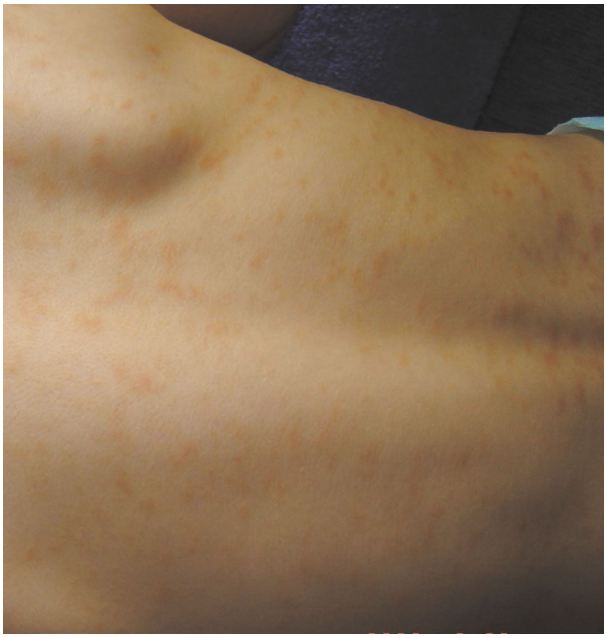

Figure 2. Pityriasis rosea –skin lesions in the second week disease; papules and erythematous-squamous lesions

Atypical cases of PR are fairly common and less readily recognized than typical eruptions, and may pose a diagnostic challenge.

Vano-Galvan S et al. reported the case of a 12-year-old black child that developed an intense pruritic papular eruption with intense facial involvement that was diagnosed of PR [24].

Amer et al. compare your findings (results for pityriasis rosea in black) with those of the American, European, and African literature on pityriasis rosea [25]. Patients had more frequent facial involvement (30%) and more scalp lesions (8%) than usually described in white populations. One third had papular lesions. The disease resolved in nearly one half of patients within 2 weeks. Residual hyperpigmentation was seen in 48% of patients. Hypopigmentation developed in 29% of patients with purely papular or papulovesicular lesions.

Herald patches is typical feature of the PR of its appearance a few days before seeding of other skin lesions suggests the diagnosis [18,26].

Herald patches is often mistakenly diagnosed as a fungal lesions. In order to exclude fungal infection should be performed microscopic examination of squama taken from the Herald patches after the addition of potassium hydroxide.

In the differential diagnosis also the following should be taken into consideration: secondary syphilis, seborrheic dermatitis, nummular eczema or pityriasis lichenoides chronica [27,28].

Other lessions occur 5-10 days after Herald patches [4,26]. Typical lesions are oval or round, less than 1 cm in diameter, slightly raised, and pink to brown. The developed lesion is covered by a fine scale that gives the skin a crinkly appearance; some lesions clear centrallyproducing a collarette of scale that is attached only at periphery. The long axis of each lesion is usually aligned with the cutaneous cleavage lines, a feature that creates the so called Christmas tree pattern on the back.

The disease is frequently asymptomatic, although pruritus may be present in few patients.

Current evidence indicates that PR is a type of viral exanthema and the etiology may be possibly linked to human herpes viruses HHV6 and HHV7 [3].

Ayanlowo et al. found that, the most accepted aetiologic factor for (PR) is viral infection and the evidences for this include the seasonal variation of the disease; intolerance to ampicillin; rarity of second attack; occasional household clustering of cases; and response to acyclovir in the early stage of the eruption [29].

In one woman of the series, who developed PR at 10 weeks' gestation and aborted 2 weeks later, plasma, peripheral blood mononulcear cells (PBMC), maternal skin, and placental and embryonic tissue were studied by calibrated quantitative (CQ) real-time (RT) polymerase chain reaction (PCR) for human herpesvirus 6 and 7 (HHV 6 I 7). HHV 6 DNA was detected in plasma, PBMC, skin, placenta, and embryonic tissue HHV 7 DNA was absent [5].

In PR, HHV 6 might infect, via placenta, the fetus, inducing premature delivery with neonatal hypotonia and even fetal demise especially if the cutaneous lesions develop within 15 weeks' gestation.

Are also reported cases of normal pregnancies and births in spite of the PR before 15 weeks' gestation [30].

There is not yet established rules PR treatment, because it seems that this disease does not require treatment and resolve spontaneously after 4-8 weeks [31,32].

Drago i wsp. described a full recovery within two weeks most patients treated for 1 week oral acyclovir compared with placebo [33]. Sharma i wsp. presented an alternative plan of treatment. Most of the patients in their study, who underwent two weeks of oral erythromycin treatment, fully recovered during the two weeks [6].

For comparison, Amer, et al giving for 5 days oral azithromycin or placebo, did not observe differences in the clinical course of disease [34].

Conclusion

Rarity, as well as the unusual location of the changes, as well as their nature cause that PR is almost unrecognizable in infants and young children. The presence of herald plaques suggests to us the diagnosis.

It is important to distinguish PR from other childhood exanthems.

REFERENCES

1. Gibert M: Traite' pratique des maladies de peau et de la syphilis. 3rd ed. Paris: Plon; 1860. p. 402.
2. Precival GH: Pityriasis rosea. Br J Dermatol 1932; 44: 241-53.
3. Bitencourt Miranda SM, DelmaestroII D, Bittencourt de MirandaIII P, Filgueira AL, Faria de Souza Pontes L: Pitiríase rósea. An. Bras. Dermatol, 2008; 83: 461-469.
4. Browning JC: An update on pityriasis rosea and other similar childhood exanthems. Curr Opin Pediatr. 2009; 21: 481-485.
5. Drago F, Broccolo F, Zaccaria E, Malnati M, Cocuzza C, Lusso P, et al: Pregnancy outcome in patients with pityriasis rosea. J Am Acad Dermatol. 2008; 58 (Suppl 1): 78-83.
6. Sharma PK, Yadav TP, Gautam RK, Taneja N, Satyanaryana L: Erythromycin in pityriasis rosea: A double blind, placebo controlled clinical trial. J Am Acad Dermatol 2000; 42: 241-244.
7. Zawar V, Jerajani H, Pol R: Current trends in pityriasis rosea. Expert Review of Dermatology, 2010; 5: 325-333.
8. Polat M, Gür G, Tamer E, Üstün H, Allý N: Veziküler Pitriyazis Rosea: Oral Eritromisine Yanýt Veren Bir Olgu - Editöre Mektuplar. Türk Dermatoloji Dergisi 2008; 2: 133-4.
9. Brzeziński P, Passarini B, Nogueira A, Sokołowska-Wojdyło M: Dermatology eponyms – phenomen / sign –Dictionary (C). N Dermatol Online. 2011; 2: 81-100.
10. Watson W, Kapur S: Atopic dermatitis. Allergy Asthma Clin Immunol. 2011; 10: S4.
11. Heller AJ: Allergic skin disease. Facial Plast Surg Clin North Am. 2012; 20: 31-42.
12. Nwabudike LC: Seborrheic dermatitis and homeopathy. Our Dermatol Online. 2011; 2: 208-210.
13. Poindexter GB, Burkhart CN, Morrell DS: Therapies for pediatric seborrheic dermatitis. Pediatr Ann. 2009; 38: 333-338.
14. Traore A, Korsaga-Some N, Niamba P, Barro F, Sanou I, Drabo YJ: Pityriasis rosea in secondary schools in Ouagadougou, Burkina Faso. Ann Dermatol Venereol. 2001; 128: 605-609.
15. Giam YC: Skin diseases in children in Singapore. Ann Acad Med Singapore 1988; 17: 569-5.
16. Brar BK, Pall A, Gupta RR: Pityriasis rosea unilateralis. Indian J Dermatol Venerol Leprol. 2003; 69: 42-43.
17. Zawar V: Giant pityriasis rosea. Ind J Dermatol. 2010; 2: 192-194.
18. Ang CC, Tay YK: Blaschkoid pityriasis rosea. J Am Acad Dermatol. 2009; 61: 906-908.
19. Ahmed I,Charles-Holmes R: Localized pityriasis rosea. Clin Exp Dermatol. 2000; 25: 624-626.
20. Gibney MD, Leonardi CL: Acute papulo-squamous eruption of the extremities
demonstrating an isomorphic response. Arch Dermatol. 1997; 133: 649-654.
21.Chuh A, Zawar V, Lee A: Atypical presentations of pityriasis rosea: case presentations. J Eur Acad Dermatol Venerol. 2005; 19: 120-126.
22. Kay MH, Rapini RP, Fritz KA: Oral lesions in pityriasis rosea. Arch Dermatol 1985; 121: 1449-1451.
23. Friedman SJ: Pityriasis rosea with erythema multiforme-like lesions. J Am Acad Dermatol 1987; 17: 135-136.
24. Vano-Galvan S, Ma D-L, Lopez-Neyra A, Perez B, Muñoz-Zato E, Jaén P: Atypical Pityriasis rosea in a black child: a case report. Cases J 2009; 2: 6796.
25. Amer A, Fischer H, Li X: The natural history of pityriasis rosea in black American children: how correct is the „classic" description? Arch Pediatr Adolesc Med. 2007; 161: 503-506.

26. Turchin I, Adams SP, Enta T: Dermacase. Pityriasis rosea. Canad Fam Phys. 2004;50: 41.
27. Gündüz O, Ersoy-Evans S, Karaduman A: Childhood pityriasis rosea. Pediatr Dermatol 2009; 26: 750-751.
28. Glick Z, Khachemoune A: A teenage girl with rash. Pityriasis rosea. Pediatr Ann. 2008; 37: 664- 667.
29. Ayanlowo O, Akinkugbe A, Olumide Y: The pityriasis rosea calendar: a 7 year review of seasonal variation, age and sex distribution. Nig Q J Hosp Med. 2010; 20: 29-31.
30. Chuh A, Zawar V: Case reports and studies on pityriasis rosea – from number of patients to meta-analyses and diagnostic criteria. Our Dermatol Online. 2012; 3: 141-142.
31. Egwin AS, Martis J, Bhat RM, Kamath GH, Nanda KB: A clinical study on pityriasis rosea. Indian J Dermatol. 2005; 50: 136-138.
32. Sharma L, Srivastava K: Clinicoepidemiological study of pityriasis rosea. Indian J Dermatol Venerol Leprol. 2008; 74: 647-649.
33. Drago F, Vecchio F, Rebora A: Use of highdose acyclovir in pityriasis rosea. J. Am. Acad. Dermatol., 2006; 54: 82-85.
34. Amer A, Fischer H: Azithromycin does not cure pityriasis rosea. Pediatrics, 2006; 117: 1703-1705.