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# Pityriasis Rosea In A Pregnant Woman: Is Pityriasis Rosea Important In Pregnancy?

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### Özet

29 yaşında gebe 10 gündür mevcut olan yaygın döküntü şikâyeti ile polikliniğimize başvurdu. Dermatolojik muayenesinde boyun, gövde üst bölümü, kollar, kalça ve bacak üst kısımlarında yakacık tarzı skuamlı, somon renkli plaklar mevcuttu. Lezyonların birinden deri biyopsisi alındı. Klinik ve histopatolojik bulgularla pitiriyazis rozea tanısı konuldu. Topikal kortikosteroid ve nemlendirici uygulaması ile hastanın lezyonları 5 hafta içinde geriledi.

Pitiriyazis rozea (PR) gövdeden başlayan (madalyon plak), kendi kendini sınırlayan, sık görülen akut bir tablodur ve sıklıkla asemptomatiktir. Gebelikte nadir olarak bildirilmiştir. PR, benign bir hastalık olmasına rağmen HHV-6 ve HHV-7 gibi infeksiyöz etyoloji nedeniyle özellikle de gebeliğin ilk haftalarında fetal infeksiyon, prematür doğum ve hatta ölü doğum riskleri nedeniyle dikkate alınmalıdır. Hastamızın gebeliği ve spontan doğumu sorunsuz gerçekleşti. Yenidoğan 3540 g ağırlığında ve termde dünyaya gelip, konjenital anomali veya deri lezyonu gözlenmedi.

Gebelikte PR ve sonuçları konusunda daha fazla çalışmaya ihtiyaç bulunmaktadır. Rutin obstetrik kontrollerde deri lezyonları saptandığında mutlaka dermatoloji konsültasyonu istenmelidir.

Anahtar Kelimeler: pitiriyazis rozea, gebelik, viral hastalık

#### Abstract

A 29-year-old pregnant woman was admitted to our out-patient clinic with the complaint of generalized eruption for 10 days. On dermatological examination, salmon-colored scaly patches with peripheral collarette scaling were observed localized on the neck, upper trunk, arms, thighs and upper limbs, accompanied with mild itching. Skin biopsy was performed from one of the lesions. According to the clinical and histopathological findings, the diagnosis was performed as pityriasis rosea. Within 5 weeks her lesions were regressed by the topically application of emollients and corticosteroids.

Pityriasis rosea (PR) is a common acute, self-limiting skin eruption which typically begins on the trunk (herald patch) and is often asymptomatic. It has been rarely reported in pregnancy. Although PR is a benign disease, the possibility of an infectious etiology, especially HHV-6 and HHV-7, is of particular concern due to the risks of fetal infection, premature delivery and even fetal death, particularly during the first weeks of gestation. Our patient's pregnancy and spontaneous delivery were uneventful. The newborn with a birth weight of 3540 g was at full term and did not show any congenital anomaly and or skin lesion.

More studies are needed to understand PR and its outcomes in pregnancy. It is however advised to concult with a dermatologist, when such symptoms are observed in routine obstetric practice.

Keywords: pityriasis rosea, pregnancy, viral disease

### **Genel Bilgiler**

Pityriasis rosea (PR) is a common acute, self-limiting skin eruption which typically begins on the trunk (herald patch) and is often asymptomatic. This large lesion is commonly 2 to 10 cm in diameter, ovoid, erythematous, and slightly raised, with a typical collarette of scale at the margin (1). Within several days to 3 weeks the initial lesions are followed by the appearance of numerous similar looking, smaller lesions located along the lines of cleavage of the trunk (a so-called Christmas tree pattern). These lesions, like the herald patch, are salmon colored, ovoid, raised, and have the same collarette of scale. Elsewhere on the body, the lesions follow the cleavage lines transversely across the lower abdomen and back, circumferentially around the shoulders, and in

a V-shaped pattern on the upper chest. The rash lasts approximately 2–4 weeks (2,3).

Except for mild to severe itching no systemic symptoms are present during the rash phase of pityriasis rosea. Clinically, PR may have prodromal symptoms that may precede the appearance of the herald patch. They consist of general malaise, fatigue, nausea, headache, joint pain, swelling of lymph nodes, and especially, mild fever and a sore throat (1,2). Diagnosis is based on clinical appearance and distribution. Dermatological differential diagnosis includes tinea corporis, tinea versicolor, drug eruptions, psoriasis, parapsoriasis, pityriasis lichenoides chronica, lichen planus, secondary syphilisand

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Phone: 0 90 236 236 09 89 Fax : 0 90 236 238 21 58 E-mail: editorsbed@cbu.edu.tr mastocytosis (2,4).Biopsy is usually not indicated in the evaluation of patients with suspected pityriasis rosea. The histopathologic features are not specific (2).

Pityriasis rosea is reported to occur equally in both sexes or slightly more often in females. Although the disease occurs mostly between the ages of 20 and 40, it has also been reported in children (4).

## Case report

A 29-year-old female patient was admitted to our outpatient clinic with the complaint of generalized eruption for 10 days. She was in the 21<sup>st</sup> week of her first planned pregnancy. She had no preceeding history of fever or other prodromal symptoms. Drug exposure before skin eruption was excluded. On dermatological examination, salmon-colored scaly patches with peripheral collarette scaling were observed localized on the neck, upper trunk, arms, thighs and upper limbs, accompanied with mild itching (Figures 1-3).



Figure 1. salmon-colored scaly patches with peripheral collarette scaling localized on the gluteal region



Figure 2. salmon-colored scaly patches with peripheral collarette scaling localized on the thigh



**Figure 3.** Salmon-colored scaly patches with peripheral collarette scaling localized on the abdominal region

A larger oval shaped lesion on chest ('herald patch') had appeared a few days ago. Scalp, genital region and palmoplantar surfaces were unaffected.

The lesions were mostly circular but oval-shaped lesions were orientated along lines of skin cleavage. Skin biopsy from one of the performed lesions. Histopathological examination revealed hyperkeratosis, mild acanthosis and spongiosis, with a moderate mononuclear infiltrate in the upper dermis, suggesting PR Laboratory tests including blood count and liver function tests were in normal ranges. Venereal Disease Research Laboratory (VDRL) test was negative. We prescribed emollients and local corticosteroids for the pruritic lesions for 2 weeks. Her eruption remitted completely within five weeks after the initial presentation. Her pregnancy and spontaneous delivery were uneventful. The newborn with a birth weight of 3540 g was at full term and did not show any congenital anomaly and or skin lesion.

#### **Discussion**

PR is a common skin disease, although it has been rarely reported in pregnancy (5,6). The etiology of PR is still unknown, but many epidemiologic and clinical features suggest that an infective agent may be implicated (2). Lemster et al. reported a case of PR occuring simultaneously in a couple, concluding that this case concerning a couple is an important one as it supports the infectious etiology hypothesis of the disease (7). An association with human herpesvirus 6 and 7 (HHV-6 and HHV-7) has been reported but remains controversial. Epstein-Barr virus, Parvovirus B19, Chlamydia Chlamydia pneumoniae, trachomatis, Legionella longbeachae, Legionella micdadei, Legionella pneumophila, and Mycoplasma pneumoniae also have been suggested as potential infectious agents in pityriasis rosea (8,9).

The viral etiology was hypothesized in the view of the electron microscopy observation of intranuclear and intracytoplasmic viral particles and by the detection of cytolytic degeneration of keratinocytes (10). Some studies provided additional evidence of the PR association with the reactivation of HHV-6 and HHV-7. The DNA load was measured in plasma, peripheral blood mononuclear cells (PBMC) and tissues of patients with active PR (11.12).

Herpes viruses (including cytomegalovirus (CMV), herpes simplex viruses (HSV) 1 and 2 and human herpes viruses (HHV) 6,7 and 8 are capable of crossing the placenta and causing in utero infection and could potentially contribute directly or indirectly to adverse pregnancy outcomes (13,14). Such has been suggested by the detection of HHV6 and HHV7 DNA in the genital tracts of women, and by HHV6 DNA in a few fetuses, placentas, and umbilical cord bloods (15,16). HHV 6 and 7 are able to cause a primary infection, to establish a latent infection in a specific set of cells of their host, and to reactivate if conditions of altered immunity develop (15,17,18).

Although the placenta acts as a potential barrier to the transfer of viruses from mother to fetus during the viremic phase of maternal infection, sometimes the placental barrier may be less effective in early pregnancy and when the placenta is damaged (16).

The possibility of an infectious etiology is of particular concern due to the risks of fetal infection, premature delivery and even fetal death, particularly during the first weeks of gestation, when the lesions are diffuse or constitutional symptoms are present (6).

Drago et al. concluded in their report that PR during pregnancy can be important and it may cause premature delivery and even fetal demise. Out of 38 pregnant women with PR, 13% miscarried before 16 weeks' gestation, a figure not far from that of the miscarriages in the general population. The greatest risk to the fetus occurred when PR developed in the first 15 weeks of gestation.

Neonatal hypotonia, weak motility, and hyporeactivity were noted in 6 cases (6). However, according to the published few case reports, in which the patients are in the first trimester of pregnancy, there is no evidence to date that there is an increased teratogenic risk for adverse pregnancy outcome associated with PR in pregnancy (19,20). Likewise our patient's pregnancy and delivery were uneventful. Our patient was in the second trimester of pregnancy and she denied constitutional symptoms.

Although PR is a benign disease, on account of the potential risk of HHV-6 related congenital infections and the intrauterine transmission of HHV-6 and HHV-7 on reactivation of these infections in pregnancy, PR may indicate a possible fatal infection, premature delivery and even fetal death. Very little is known about the passage of virus across the placenta or the role of placental viral infection in adverse pregnancy and fetal outcomes. Therefore attention shoud be paid, especially during the first weeks of gestation and when the constitutional symptoms are present. More studies are needed to understand PR and its outcomes in pregnancy. It is however advised to concult with a dermatologist, when such symptoms are observed in routine obstetric practice.

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