Pityriasis Rosea in a Mother and her Daughter: A Case Report

Sir,

A 30-year-old female was referred to our outpatient clinic for a 10-day history of symptomless skin lesions on her trunk. The patient was otherwise healthy and had no history of taking any medication. During her physical examination, disseminated erythematous maculopapular eruptions with fine scales, having a typical "Christmas tree" appearance, were observed on her back and abdomen [Figure 1a]. A similar, but larger, lesion with a collarette scale (herald patch) was also detected on her abdomen. On the basis of her clinical findings, the patient was diagnosed with pityriasis rosea (PR) and 600 mg/day of oral acyclovir was prescribed.

After 3 weeks, the patient returned to the clinic complaining of similar lesions in her 7-year-old daughter. During the physical examination of the child, we observed a typical herald patch on her back in addition to sparse pink maculopapular lesions on her trunk [Figure 1b]. The child had no history of taking medications or vaccination. Because PR is not contagious and familial cases are very rare, we performed a skin biopsy from one of the maternal lesions.Histological examination revealed focal parakeratosis, mild acanthosis, spongiosis, exocytosis in the upper dermis, and extravasation of red blood cells [Figure 2]. The diagnosis of PR was confirmed by these histological findings, and the child was treated with 800 mg/day oral erythromycin. One month later, all skin lesions of both the mother and her child had subsided without scarring or dyspigmentation.

PR is a self-limiting papulosquamous dermatosis that has a prevalence of 1–3%, and mainly occurs in individuals 15–30 years of age. This disease is almost equally prevalent in both sexes.[1,2]

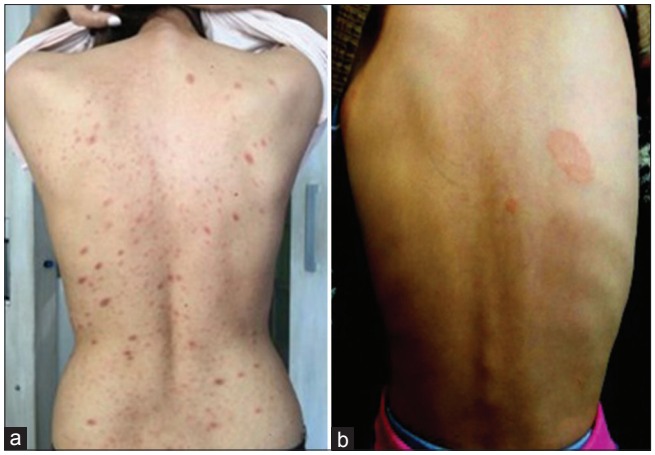

Figure 1: (a) Erythematous maculopapular lesions with fine scales on the back of a 30-year-old female (the mother) with typical Christmas tree appearance. (b) Typical herald patch and a few pityriasis rosea lesions on the back of a 7-year-old girl (the daughter)

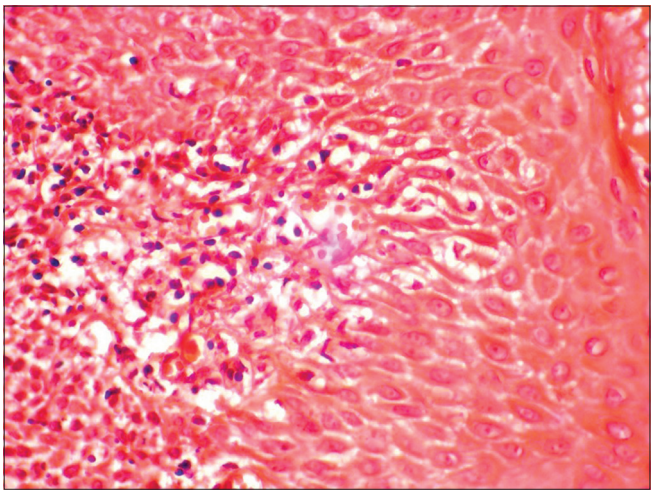

Figure 2: Histopathologic examination of maternal papulosquamous lesion: Spongiosis, exocytosis with moderate mononuclear perivascular infiltrate in the upper dermis and extravasated RBCs (H and E, ×40)

Table 1:Case reports of familial pityriasis rosea (PR)

Authors (year)	Case report
Nile and Klumpp[4] (1940)	Thirty-five cases of PR in different households; 6 of them were couples (3 cases)
Miller[5] (1941)	Three cases of PR in a family within 6 weeks
Lemster *et al.*[3] (2010)	A pregnant woman and her husband who had simultaneous PR

PR initially manifests with the appearance of a herald patch, which is a pink or erythematous oval patch with a diameter of 2–4 cm. Several smaller eruptions appear during a few days, with their longitudinal axes parallel to cleavage lines, resulting in the characteristic "Christmas tree" appearance.[1]

Various atypical forms of PR have been reported with a prevalence rate of 20%. These variants may manifest with different morphologies (vesicular, purpuric, follicular, or target), distributions (reverse, unilateral, acral, or localized), natural courses, and symptoms.[2]

The precise etiology of the disease is unknown.[1] Nevertheless, because of the high occurrence of this disease during winter and its prodromal symptoms, infectious agents have been implicated as etiological factors. These infectious agents include viral [cytomegalovirus, Epstein–Barr virus, and human herpes virus (HHV) 6 and 7], bacterial (*Legionella*, *Mycoplasma*, and *Chlamydia*), and fungal factors.[1,3] Most recent investigations have focused on the association between PR and HHV-6 and HHV-7. DNAs of these viruses have been detected in nonlesional skin, serum, peripheral white blood cells, and saliva of patients with PR, and their specific antigens have been also found in skin lesions. Furthermore, atypical presentations and recurrences of PR may be explained by interactions between HHV-6 and HHV-7.[1]

A literature review reveals rare cases of concurrent diagnosis of PR in two or more family members living in the same house.[3] These few cases have been summarized in Table 1.

We reported an additional case of familial PR occurring simultaneously in a mother and her daughter. According to the familial involvement in these cases, the possibility of infectious etiology of the disease increases.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Eisman S, Sinclair R. Pityriasis rosea.BMJ 2015;351.
2. Tehranchinia Z, Rahimi H. Atypical pityriasis rosea with a target-shape herald patch. Iranian J Dermatol 2010;13:24-46.
3. Lemster N, Neumark M, Arieh I. Pityriasis rosea in a woman and her husband - Case report and review of the literature. Case Rep Dermatol 2010;2:135-9.
4. Miller TH. Pityriasis rosea. Report of three cases in one family, with clinical variations in two of them. Arch Derm Syphilol 1941;44:66-8.
5. Niles HD, Klumpp MM. Pityriasis rosea: Review of the literature and report of two hundred and nineteen cases. Arch Derm Syphilol. 1940;41:264.

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