ATYPICAL PITYRIASIS ROSEA: A CASE REPORT AND A REVIEW OF LITERATURE

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Aim: Pityriasis rosea (PR) is a common acute inflammatory skin disease characterized by pruritic erythematous papulosquamous eruption that is self-limited which can rarely pose a diagnostic challenge. In this report, we present a rare presentation of PR.

Method: the case was completely evaluated including laboratory works and a final diagnosis of erythema multiforme-like PR was reached. Besides, we reviewed all atypical presentations of PR that are reported in the medical literature.

Results: our patient has a morphological variant of PR which is erythema multiforme-like. The presence of a herald patch and the rapid resolution of the symptoms supports our diagnosis. This variant is considered rare and to our knowledge, this is the seventh case of erythema multiforme-like PR reported in the medical literature.

In conclusion: we report a case of erythema multiforme-like PR. It is important that physicians recognize the wide spectrum of PR variants so that appropriate management can be arranged

Keywords: pityriasis rosea, erythema multiforme, papulosquamous eruption, herald patch, purpura

1. Introduction

Pityriasis rosea (PR) is a self-limiting papulosquamous skin disorder the etiology of which is unclear. However, an infectious mechanism is proposed based on its seasonal occurrence, clustering of cases and presence of prodromal symptoms [1–3]. Recently DNA of human herpes virus 6 (HHV-6) and human herpes virus 7 (HHV-7) have been isolated from skin, peripheral blood mononuclear cells, serum and saliva samples of patients with PR [4]. In addition, PR and PR-like eruption can occur in association with drugs. Clinical characteristic of the disease includes the initial appearance of an initial plaque described as a single round or oval, sharply demarcated lesion occurring in up to 90% of the cases [5]. This heralds the appearance of a secondary eruption occurring mostly over the trunk and proximal extremities and hence is termed “herald patch”. The secondary rash is of similar shape to the mother patch but is widely distributed and symmetrical along the lines of skin cleavage. The disease can also present atypically with a vesicular, purpuric, urticarial, or purpuric rash. Here, we are reporting a rare case of PR presenting in a one year old infant with an erythema multiforme-like rash.

2. The case

A one-year-old girl presented to the allergy and dermatology clinic at king Fahad hospital of the university, Al-Khobar, Saudi Arabia with a one week history of fever and a sudden eruption of a severely pruritic generalized skin eruption. The rash was preceded by an upper respiratory tract infection 2 weeks prior. In addition, one week prior to the appearance of this generalized rash, a round shaped single scaly lesion measuring 3 centimeter in diameter appeared on the right thigh. This lesion was completely resolved within a week but was followed by eruption of a wide spread rash of a similar shape but intensely pruritic. There was no history of eczema in the child or family members, and no family history of atopy, psoriasis or immunodeficiency. There was no recent vaccination, and drug history was negative.

On examination the child was healthy, active but irritable. She had a low grade fever of 38 degrees Celsius. Her systemic examination was unremarkable with no lymphadenopathy. Skin examination revealed widespread erythematous papules and plaques ranging in size from 4–10 mm in diameter present over the trunk, and upper and lower extremities (Fig. 1). A significant number of lesions had collarete scale while others showed central necrotic areas covered with crusts resembling target lesions observed commonly in erythema multiforme (Fig. 2). The lesions were widespread and therefore their distribution along the line of cleavage was not appreciated. The rash spared on the face, scalp, palms, soles and mucous membranes.

Laboratory investigation was unremarkable. This included a complete blood count, liver and renal function tests, and urine analysis. Immunoglobulin levels were within normal range. Mycoplasma titer and HSV serology were negative. Histopathological examination of lesional skin biopsy revealed spongiotic dermatitis. No characteristic features of erythema multiforme were found. Based on this presentation, a clinical diagnosis of erythema multiforme like pityriasis rosea was made.
Fig. 1. Erythema multiforme-like eruption of pityriasis rosea on the trunk

Fig. 2. Targetoid lesions on the knee area
The patient was managed with mild topical steroid and oral antihistamine. At a two weeks follow up appointment, the rash was resolving with no newly occurring lesions and the child was symptom free. By the 5th week the rash had completely resolved and secondary post-inflammatory hyperpigmentation was noted.

3. Discussion
PR is a common cutaneous disease reported in all races with an incidence of 6.8 per 1000 dermatological cases [6]. Atypical variants of PR, with respect to morphology, size, distribution, number, site, and course of disease can occur in almost 20% of cases [7]. The atypical vesicular PR usually appears as a generalized eruption of 2–6 mm vesicles, each having a central bulla, or a rosette of vesicles and bullae. This form is commoner in children and young adults, and may be extensive and severely pruritic. Purpuric rash, on the other hand, appears as macular purpuric lesions that may involve the palate while urticarial appearing PR usually presents as raised lesions resembling urticarial wheals accompanied by intense pruritus [8–11]. Other atypical forms of PR reported in the literature included plaque; lichenoid; erythrodermic and erythema multiforme-like rashes [7, 12–23].

Atypical size of lesions in PR have been reported and include the presence of enormous plaques, a condition termed PR gigantea of Darier, and papular PR with numerous small papules ranging between 1–2 mm in diameter [17, 18]. Atypical distribution of PR lesions include PR inversus which affects the face, axillae and groin while sparing the trunk [18]. The limb-girdle type is considered another type of atypically distributed PR in which the eruption is restricted to the shoulders or hips [18]. In addition, cases with asymmetrical rash distribution, or strictly right-sided or left-sided distribution have been reported [12]. Atypical site of lesions with involvements of the face, scalp, hands and feet, finger and toe tips, scalp, eyelids and penis have been reported [13, 17]. The oral cavity is another atypical site for PR lesions [14]. PR is usually associated with pruritis. However, a specific type; PR irritate, describes a type of PR in which patients complain of severe itch, pain and burning sensation not typically occurring with the classical PR [15]. Drug-induced PR-like rashes have been reported in relation with captopril, gold, isotretinoin, non-steroidal anti-inflammatory agents, omeprazole, terbinafine and tyrosine kinase inhibitor [24, 30].

Histopathological findings of PR are relatively nonspecific and represent those of a subacute or chronic dermatitis. Typically, focal parakeratosis, diminished granular layer, spongiosis and exocytosis are seen in the epidermis. In addition, small spongiotic vesicles are infrequently observed [32]. The papillary dermis shows edema and mild-to-moderate lymphohistiocytic perivascular infiltrate [32]. Characteristic findings of PR include the presence of extravasation of erythrocytes in the dermis and dyskeratotic cells in the epidermis as described by Okamoto et al [32–34].

It is worth mentioning that erythema multiforme lesions show many similar histological features with PR. This includes findings of spongiosis, vacuolar degeneration of stratum basale, lymphocytic exocytosis into the epidermis, papillary dermal edema, dense mononuclear infiltrate, and extravasation of erythrocytes. However, Satellite cell necrosis is a distinguishing feature seen only in erythema multiforme cases.

There are various symptomatic treatment modalities for PR. Sharma et al., achieved complete response resolution of the rash within 2 weeks of treatment with erythromycin compared to none in the placebo group [35]. UVB phototherapy can alleviate the severity of PR [36]. In a randomized controlled study, a good response to acyclovir was observed in PR, while one case had been treated successfully with dapsone [37–39].

We believe that the patient presented above has a morphological variant of PR which presented as an erythema multiforme-like lesion. The presence of a herald patch that preceded the onset of a secondary widely distributed rash along with the presence of collarette scales are both considered typical features observed in patients with PR. In addition, the rapid resolution of the symptoms supports our diagnosis of PR. This variant is considered rare and to our knowledge, this is the seventh case of erythema multiforme-like PR reported in the literature.

In conclusion, we report here a case of erythema multiforme-like PR. Diagnosis was based on the clinical history and examination. The histopathological findings were suggestive but not conclusive. Supportive treatment and close follow up of the patient further confirmed our diagnosis. It is important that physicians recognize the wide spectrum of PR variants so that appropriate management can be arranged.

References


References
Тренировка мышц тазового дна относится к первой линии лечения недержания мочи после радикальной простатэктомии. Биологическая обратная связь значительно повышает эффективность лечения. Раннее и отсроченное применение тренировки мышц таза под контролем биологической обратной связи обладает сравнимой эффективностью. Тренировка мышц таза активирует сознательный контроль механизма удержания

**Ключевые слова:** радикальная простатэктомия, недержание мочи, биологическая обратная связь

**Aim.** Comparing the urine incontinence duration after prostatectomy and efficiency of training of pelvic floor muscles.

**Methods.** We applied training of pelvic floor muscles under control of biofeedback at 142 patients. Up to 2 months after operation 78 patients had an urine incontinence. 64 patients had an urine incontinence more than 2 months.

**Result.** Terms of restoration of urine continence after training of pelvic floor muscles in groups had no significant distinctions \((p=0.371)\).

**Conclusions.** Training of pelvic floor muscles under control of biofeedback allows to activate functional ways of continence of urine

**Keywords:** radical prostatectomy, urine incontinence, biofeedback

1. **Введение**

Тренировка мышц тазового дна относится к первой линии лечения недержания мочи после простатэктомии. Эффективность такого лечения сильно зависит от терпения пациента и выраженности его мотивации [1, 2]. Метод реабилитации, при котором человеку с помощью электронных приборов в режиме реального времени предоставляется информация о физиологических показателях деятельности его внутренних органов посредством визуальных или звуковых сигналов, называется биологическая обратная связь.

Отмечено значимо раннее восстановление функции удержания у пациентов, занимающихся тренировкой мышц тазового дна по сравнению с пациентами, которые такой тренировкой не занимались [3]. Через год, значимой разницы между группами больных не отмечено. Кохрановский анализ не показал значимой разницы между эффективностью тренировок с применением биологической обратной связи и без нее [3–5]. Показано, что функция удержания мочи у пациентов, выполнявших тренировку мышц тазового дна с применением и без биологической обратной связи, была лучше, чем у пациентов, которые не выполняли тренировок [6].

2. **Литературный обзор**

Система упражнений, разработанная Д. Н. Атабековым и А. Кегелем (1949), направлена на повышение тонуса произвольных мышц таза и развитие сильного рефлекторного сокращения в ответ на внезапное повышение внутрибрюшного давления. Способность сознательно управлять мышцами тазового дна позволяет не только увеличивать замыкательную способность сфинктерных механизмов, но и подавлять не- произвольные сокращения детrusora. Природа этого явления не вполне ясна. Возможно, сокращение по-