

Tinea incognito-like generalized pustular psoriasis: A case report

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Summary

Pustular psoriasis is a rare, immune-mediated systematic skin disorder characterized by yellowish pustules on an erythematous base with multiform clinical presentations and distribution patterns. There are many forms of skin lesions in patients with pustular psoriasis. In this article, we report a case of a male patient having skin lesions very similar to tinea incognito, however definitely diagnosed with pustular psoriasis.

Keywords: Pustular psoriasis, tinea incognito.

1. Background

Pustular psoriasis appears as numerous discrete or confluent superficial, yellowish pustules on a background of erythema. Pustular psoriasis is further subdivided based on the clinical presentation and location of the pustules. Subtypes of pustular psoriasis include generalized pustular psoriasis (GPP), acrodermatitis continua of Hallopeau, and palmoplantar pustular psoriasis. Generalized pustular psoriasis may arise primarily or secondarily from plaque psoriasis. We describe a patient having pustular psoriasis on his trunk, right shoulder, and buttock after being given a systemic corticosteroid application resembling Tinea incognito. He finally responded very well to treatment with methotrexate and topical drugs.

2. Case presentation

A 46-year-old man patient was admitted to our department with a skin lesion consisting of yellowish small pustules on an erythematous base with a clear arc-shaped border. This patient had a history of plaque psoriasis for 10 years, and about 1 year recently he has been treated with

corticosteroid injections. Physical examination revealed erythematous, sharply demarcated lesions with pustules on the upper trunk, right shoulder, and buttock. The patient had been diagnosed with psoriasis elsewhere, therefore corticosteroid topical therapy had been continued. However, the skin lesions responded poorly. Finally, we decided to introduce a regimen including methotrexate 10mg per week orally and topical calcipotriol plus corticosteroid. The treatment also combined with NB-UVB gradually increasing the dose of irradiation. After 4 weeks of the treatment, complete resolution of the erythema and pustules were observed.



Figure 1. Widespread erythematous and pustular lesions

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Figure 1. Widespread erythematous and pustular lesions (Next)



Figure 2. After 4 weeks treatment

3. Discussion

Pustular psoriasis is a rare, immune-mediated systematic skin disorder characterized by yellowish pustules on an erythematous base with multiform clinical presentations and distribution patterns. In the adult age group, the disease appears between the ages of 40 and 50. The pustules can be widespread or localized and are characterized by a sterile predominantly neutrophilic infiltrate.

Within the classification of pustular psoriasis, the disease is further subdivided into generalized

pustular psoriasis (GPP) and localized pustular psoriasis. GPP includes acute GPP, pustular psoriasis of pregnancy, and infantile/juvenile pustular psoriasis. Localized pustular psoriasis divides into palmoplantar psoriasis and acrodermatitis continua of Hallopeau [3]. Sixty-five percent of the acute GPP group occurs in patients with a prior diagnosis of psoriasis vulgaris [5] and historically, acute GPP has been presented as a variant of plaque psoriasis. However, recent research indicates that acute GPP and plaque psoriasis are genetically distinct conditions without a common pathophysiologic mechanism. Most cases of pustular psoriasis are idiopathic however, risk factors may have a role in the etiology of pustular psoriasis. These include sudden withdrawal of systemic steroids, skin infections (*Staphylococcus aureus*), electrolytes imbalance, medications (lithium, iodine, penicillin, interferon-alpha, etc.), pregnancy, phototherapy, vaccination [1].

Disease-specific medications including systematic retinoids (acitretin, isotretinoin), methotrexate, cyclosporine, and infliximab are considered the first-line treatment in adult patients. In the pediatric group, acitretin, cyclosporine, methotrexate, and etanercept are preferred [2]. Second-line options include systematic treatments for the diffuse disease (etanercept and adalimumab) or topical treatments for localized disease (corticosteroids, calcipotriene, and tacrolimus). All of these options can be used as monotherapy or in a combination with a first-line option. A phototherapy is an alternative option. Recent reports indicated the successful usage of IL-1 receptor antagonists (anakinra) and IL-36 receptor antagonists in the treatment of pustular psoriasis [3].

In our patient, GPP appeared after he had used and abruptly stopped systemic corticosteroids to treat psoriasis. The patient had localized skin lesions in some areas, characterized by yellowish small pustules on an erythematous base with a clear arc-shaped border. The skin lesions were very similar to those caused by tinea incognito of *Trichophyton rubrum*. Serarslan G reported a patient with tinea incognito characterized by alike pustular inflammatory skin lesions [4]. This patient was given

a combination of MTX 10mg per week, topical calcipotriol mix with corticosteroids, thus NB-UVB gradually increasing the dose. After 4 weeks, he fully recovered with complete resolution of the erythema and pustules.

4. Conclusion

In conclusion, skin lesions of pustular psoriasis can be very similar to tinea incognito of *T. rubrum*. Therefore, tinea infection should be always in mind as a differential diagnosis of pustular psoriasis in case of un-responded treatment. Therefore, considering thoroughly the patient's history, careful clinical examination, and accurate mycological findings is essential to have an effective treatment.

References

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