

## PHOTOLETTER TO THE EDITOR

## Psoriatic erythroderma associated with bullous pemphigoid: clinical appearance and histopathology

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**Abstract**

Psoriasis and bullous pemphigoid represent two clinically well-characterized, chronic, inflammatory skin conditions. The concomitant occurrence of these two entities in a patient is rare. We report a 62-year-old male with personal history of psoriasis vulgaris who developed disseminated bullous pemphigoid associated with psoriatic erythroderma. Skin histopathology from a scaly plaque was consistent with the diagnosis of psoriasis and showed subepidermal blister with inflammatory infiltrate of eosinophils with some neutrophils. (*J Dermatol Case Rep.* 2015; 9(1): 23-24)

**Key words:**

blister, pemphigoid, psoriasis

Psoriasis is a chronic inflammatory disease affecting the skin and joints. Psoriasis has been consistently associated with many cutaneous and systemic conditions. A variety of cutaneous disorders may be associated with psoriasis. The coexistence of autoimmune blistering disease in psoriasis is rare.<sup>1</sup> We report a case of coexistence of psoriatic erythroderma with bullous pemphigoid (BP).

A 62-year-old male with personal history of untreated chronic psoriasis vulgaris presented with erythroderma and blisters all over the body for 1 month. The blisters were noticed first on the legs and later spread to other parts of the body. Cutaneous examination revealed an erythematous eruption affecting the whole body with tense bullae on trunk and lower limbs (Fig. 1). No lesions on oral mucosa or genitalia were present. Bulla spread sign and Nikolsky's signs were negative. The routine hematological and biochemical parameters analyzed were normal. A skin biopsy was consistent with the dia-



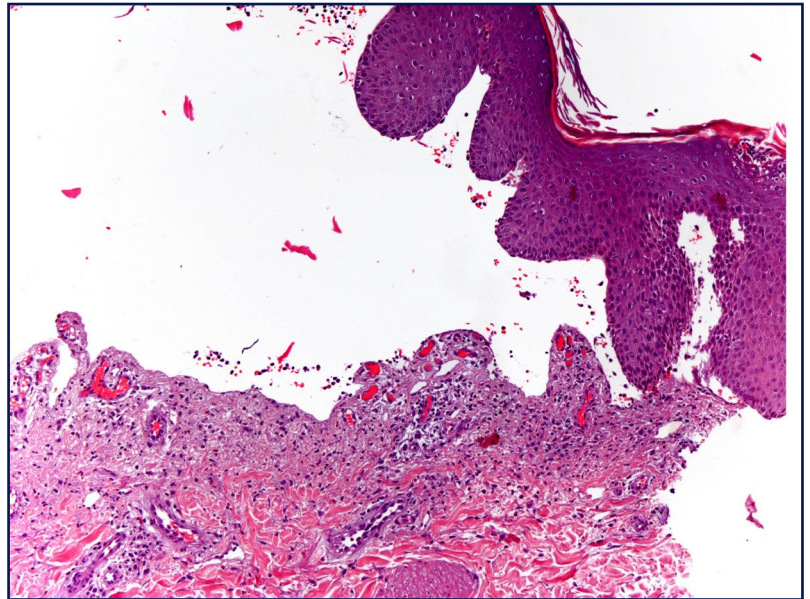
**Figure 1**

*Erythematous eruption with tense bullae on lower limbs.*

gnosis of psoriasis and showed subepidermal blister with inflammatory infiltrate at the base (eosinophils with and neutrophils). Direct immunofluorescence was positive on the dermo-epidermal junction (IgG and C3). On the roof of the blister the epidermis presented neutrophils in the stratum spinosum and microabscesses in cornea layer (Fig. 2). The adjacent epidermis has increased the rete ridges with absence focal of granular layer and evidence of neutrophils, forming Kogoj pustules and Munro microabscesses. The patient was treated with systemic corticosteroids at dose of 1 mg/kg orally. After 1-month follow-up period, psoriatic lesions and blisters have improved and after 3-month, both conditions were under control.

## Discussion

Since the initial description of coexistence of bullous disease and psoriasis by Bloom in 1929, several autoimmune bullous diseases associated with psoriasis have been reported in literature. These include pemphigus vulgaris (PV), pemphigus foliaceus (PF), pemphigus herpetiformis, bullous pemphigoid (BP), linear bullous dermatoses (LAD), cicatricial pemphigoid (CP), epidermolysis bullosa acquisita (psoriasis bullosa acquisita) and a novel bullous dermatoses targeting 200 kDa molecule present in the lower lamina lucida.<sup>2</sup> Among these, BP is the most frequent condition to be associated with psoriasis (psoriasis-pemphigoid). In recent years coexistence of bullous pemphigoid and psoriasis has been described in over 80 patients. Most previously reported cases attributed the occurrence of BP in psoriasis to topical treatment with anthralin or tar but also phototherapy, such as psoralen + ultraviolet A (PUVA) or narrowband UVB, or to the use of antitumor necrosis factor antibodies.<sup>3</sup> Here we report a case of BP eruption in a psoriatic patient apparently not related to antipsoriatic systemic or topical treatment. The pathogenic significance of this relationship is unknown. It may be suggested that psoriasis as a chronic inflammatory disease provides a particular predisposition for the immune system that, under certain circumstances, leads to an autoimmune response. However, some hypotheses suggest a genetic factor for susceptibility to the occurrence of multiple autoimmune disorders. The dysregulation of T-cell activity in psoriasis might result in the induction of specific antibodies to basement membrane antigens.<sup>4</sup> Psoriasis has been historically considered as Th1-type immune mediated disease. However,



**Figure 2**

*Skin histopathology from a scaly plaque was consistent with the diagnosis of psoriasis and showed subepidermal blister with inflammatory infiltrate of eosinophils with some neutrophils at the base. On the roof of the blister the epidermis presents neutrophils in the stratum spinosum and microabscesses in cornea layer.*

recent studies have established that Th17 is the primary pathogenetic subset of T cells, which plays a key role in autoimmunity.

Treatment of bullous pemphigoid consists of immune suppression. For localized or even extensive disease, topical glucocorticoids alone may be sufficient. Oral steroids, azathioprine, methotrexate, intravenous Ig, mycophenolate mofetil, and rituximab have been demonstrated to be effective.<sup>5</sup>

We report an unusual case of a coexistence BP eruption in a patient with psoriatic erythroderma apparently not related to antipsoriatic systemic or topical treatment.

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