A new approach on bullous pemphigoid therapy

Bullous pemphigoid (BP) is the most common subepidermal autoimmune blistering skin disease seen in the elderly. The prognosis of BP is poor, since the 1-year mortality rate has been reported to range from 25% to 40% in recent studies [1]. Corticosteroids have been so far the mainstay of therapy [2]. Antibiotics and immunosuppressants, such as cyclophosphamide and azathioprine, have also been used in order to manage the disease. Prolonged administration of such agents, however, leads to serious adverse effects, resulting in the limitation of available treatment options. Mortality associated with BP is mostly attributed to the effects of the medications [3]. Rituximab is a chimeric murine/human monoclonal antibody against human CD20, an antigen present in normal and malignant B-lymphocytes. This biological agent activates complement-dependent cytotoxicity and binds to human Fc receptors, mediating cell death through antibody-dependent cellular toxicity [4].

We report here two cases of BP in patients with chronic lymphocytic leukemia under complete remission, presenting excellent outcome after being treated with rituximab.

Patients were female, 58 and 78 years old, respectively. They both appeared with vesiculobullous lesions ranging from 0.5 to 5 cm in diameter. They were distributed in all extremities as well as in the trunk, along with severe pruritus. Skin biopsy demonstrated prominent eosinophil infiltration at the skin basement membrane area. Direct immunofluorescence (DIF) of perilesional skin was positive, revealing deposition of complement (C3) and immunoglobulins (IgG) in a linear band at the dermal–epidermal junction. Diagnosis was achieved by incubating the patients’ biopsy sample in 1 mol/l salt and repetition of DIF on salt-split skin. Thus, IgG deposits observed on the blister roof.

After an initial but ineffective regimen using oral and local H1-antihistamines added to methylprednisolone, rituximab was administered i.v. at a dosage of 375 mg/m² once weekly for 4 weeks. When infusion was completed, no blisters were observed on patients’ skin, the latter being totally free of bullae (Figure 1). Subsequent treatment included one dose of rituximab every 2 months resulting in neither bullae nor serious toxic effects for a follow-up period of 3 years.

To our knowledge, rituximab has so far been used only once for the treatment of BP. In this report, rituximab infused in combination with anti-CD25 antibody. The two cases that we present are the first in which rituximab was successfully used as monotherapy in BP. Rituximab seems to be a safe, effective and long-lasting therapy permitting reconsideration of therapeutic strategies for such a potentially fatal disease.

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Figure 1. Skin before (A) and after (B) rituximab infusion.
references


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