

LETTERS TO THE EDITOR

A case of rituximab-related urticarial reaction in cutaneous B-cell lymphoma

Editor

Only a few cases of rituximab-related urticarial reaction have been reported in patient treated for B-cell lymphoma. This phenomenon may be related to the killing of tumoral CD20 B cells in the site of the tumour. We reported another case of urticarial reaction during rituximab infusion in a patient with cutaneous lymphoma.

A 43-year-old man was referred to our hospital because of unusual erythematous skin patches involving the dorsal right infra-axillar regions. Biopsies confirmed the diagnosis of cutaneous follicular B-cell lymphoma. Complete evaluation did not reveal systemic disease. After an unsuccessful treatment with topical steroids, external radiotherapy was delivered with complete remission. However, a cutaneous relapse occurred 2 years later with thoracic and dorsal skin lesions. The patient was treated with four weekly intravenous infusions of 375 mg/m² of rituximab, the first infusion over a 6-h period, and the three consecutives over 1 h. One hour after the start of the first infusion and despite pre-medication with diphenhydramine, acetaminophen and steroid, the patient developed an urticarial reaction at the site of tumour patches and excision scars. The infusion was stopped for 2 h and the lesions spontaneously resolved. The patient could therefore complete the planned treatment with no side-effects. Surprisingly, the three last infusions of rituximab were well tolerated despite an accelerated infusion over 1 h.¹ Evaluation after the four cycles showed a complete remission status. The patient is still in complete remission with a 12-month follow-up.

To date, few cases of localized rituximab-related urticarial reactions have been described.^{2,3} These cases show urticarial lesions only located on the tumour sites. Moreover, this effect was observed during the first infusion which was realized according to the manufacturer guidelines with infusion times of 6 h and not during fast infusion of 1 h.¹ This could favour a more antitumoral effect rather than an anaphylactic mechanism. It is not known if this kind of reaction represents an indirect sign of antitumoral effect of rituximab on malignant CD20 B cells. Of note, the three reported patients experienced a complete remission after rituximab monotherapy. It is possible that this cutaneous reaction could be associated with a better response to rituximab as suggested for rash induced by epidermal growth factor receptor inhibitors⁴ or bortezomib-induced cutaneous vasculitis.⁵

Interestingly, the three reported cases only concerned primary cutaneous lymphomas. Maybe, the high concentration of malignant B cells into cutaneous lesions in primary cutaneous B-cell lymphoma may explain why this reaction has not been reported in systemic lymphoma. Additionally, all the reported cases concerned primary cutaneous B-cell lymphoma of follicular type.^{2,3} The sensitivity of follicular B cells to rituximab may explain why the cases described actually are restricted to these lymphoma subtypes.

Thus, in case of cutaneous B-cell lymphoma, in particular the follicular subtype, the first infusion of rituximab can induce urticarial reaction located to the tumour sites, even in patients treated with antihistamine and steroids. Further cases are needed to better understand the mechanism involved and to determine if this urticarial reaction may represent a surrogate marker of response.^{4,5}

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