

LETTER TO THE EDITOR

Lichenoid drug eruption associated with Bendamustine

Blood Cancer Journal (2016) 6, e438; doi:10.1038/bcj.2016.48; published online 24 June 2016

A 65-year-old man had relapsed follicular lymphoma. When he suffered a fifth relapse, he received a regimen containing bendamustine and rituximab (BR). Four weeks later, he presented with systemic erythema, swelling and bullous lesions of lips, the oral cavity, and nasal mucosa and eye pain. He could not open his mouth and had severe pain. Steven–Johnson syndrome/toxic epidermal necrolysis was diagnosed. With corticosteroid treatment and intravenous administration of oxycodone, he recovered for 2 weeks and was discharged. However, 10 days later, bullous lesions appeared again at lips (Figure 1a), oral cavity and genital mucosa. In addition, numerous erythematous plaques with Koebner's phenomenon were observed on his trunk (Figure 1b). Blood test, in which antibody was measured, showed neither candidiasis nor pemphigus. Microscopic examination revealed interface dermatitis with necrotic keratinocytes, which was a histological feature of lichenoid drug eruption. Prednisone 5 mg daily was initiated for his lichenoid drug eruption. Although with 4-month treatment his manifestation recovered little by little, mucosal lesions were intractable. His lymphoma was observed afterward because he achieved partial response by one cycle of BR. One year later, however, his wife became aware of his changing mental status. He eventually died of central nervous system involvement in lymphoma.

Lichenoid drug eruption, also known as drug-induced lichen planus, is an uncommon cutaneous adverse effect of several drugs.^{1,2} It is characterized by a symmetric eruption resembling lichen planus on the trunk and extremities. Lichenoid drug eruption may sometimes be difficult to differentiate from Stevens–Johnson syndrome/toxic epidermal necrolysis, in particular, at the time of onset.³ However, interface dermatitis is found in histological appearance, resulting in difference between lichenoid drug eruption and Steven–Johnson syndrome.⁴ In general, lichenoid drug eruptions resolve spontaneously in a few weeks to a few months with the discontinuation of the offending drug.⁵ On the other hand, in our case, systemic corticosteroid was refractory to eruptions. Although the mechanism of lichenoid drug

reaction has been unknown, lichenoid drug eruption is thought to be associated with activation of CD8 autotoxic T lymphocytes against epidermal cells. Bendamustine induced prolonged lymphocytopenia, in particular CD4 T lymphocytes. There was no understanding between bendamustine and uncommon clinical course of lichenoid drug eruption in our case. To the best of our knowledge, this is a first report of lichenoid drug eruption associated with bendamustine.

CONFLICT OF INTEREST


The authors declare no conflict of interest.

Y Kusano, Y Terui, M Yokoyama and K Hatake

Department of Hematology and Oncology, Cancer Institute Hospital, Japanese Foundation for Cancer Research, Tokyo, Japan
E-mail: yoshiharu.kusano@jfcrr.or.jp

REFERENCES

- 1 Fox GN, Harrell CC, Mehregan DR. Extensive lichenoid drug eruption due to glyburide: a case report and review of the literature. *Cutis* 2005; **76**: 41.
- 2 Brauer J, Votava HJ, Meehan S, Soter NA. Lichenoid drug eruption. *Dermatol Online J* 2009; **15**: 13.
- 3 Cho YT, Lin JW, Chen YC, Chang CY, Hsiao CH, Chung WH, Chu CY. Generalized bullous fixed drug eruption is distinct from Stevens–Johnson syndrome/toxic epidermal necrolysis by immunohistopathological features. *J Am Acad Dermatol* 2014; **70**: 539.
- 4 Sontheimer RD. Lichenoid tissue reaction/interface dermatitis: clinical and histological perspectives. *J Invest Dermatol* 2009; **129**: 1088.
- 5 Ellgehausen P, Elsner P, Burg G. Drug-induced lichen planus. *Clin Dermatol* 1998; **16**: 325–332.

 This work is licensed under a Creative Commons Attribution 4.0 International License. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in the credit line; if the material is not included under the Creative Commons license, users will need to obtain permission from the license holder to reproduce the material. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>

© The Author(s) 2016

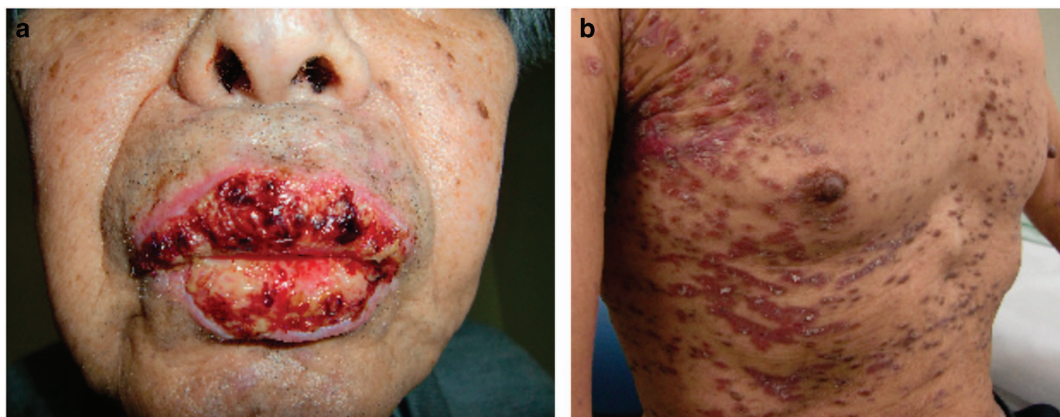


Figure 1. (a) Bullous lesions at lips. (b) Erythematous plaques with Koebner's phenomenon on his trunk.