Pityriasis rosea and pityriasis rosea-like eruptions: How to distinguish them?

To the Editor: We appreciate the article from Bitar et al[1] on ibrutinib-associated pityriasis rosea (PR)-like rash that allows us to share our experience and make some observations. Recently, we proposed criteria to distinguish PR from PR-like eruptions (Table I). In fact, distinguishing them is of paramount importance, as a typical PR may develop during but independently from a therapy.[2,3] During PR, a self-limiting exanthematous disease associated with the endogenous systemic reactivation of human herpes virus (HHV)-6 and/or HHV-7, the drug (if indispensable for the health of the patient and except for immunosuppressive therapies that can favor viral reactivation) may be cautiously continued.[4] When the skin rash is diagnosed as a drug reaction with morphological features similar to genuine PR (a PR-like eruption), it is preferable to stop the drug immediately to prevent more dangerous drug reactions. Indeed, the interesting case described by Bitar et al[1] has some of the characteristics of PR-like eruptions such as the presence of itch on the lesions, the dusky-red color of the lesions, and the superficial and perivascular eosinophil infiltration in the dermis. However, it is uncommon after several months to have resolution of the eruption without interruption of the drug. In fact, this course of the disease is more typical for PR.[4] Unfortunately, the authors have not investigated potential signs of HHV-6 and HHV-7 reactivation such as detection of HHV 6/7 DNA in plasma and detection of positive IgM antibodies against HHV-6/7 in serum. In addition, they did not refer to peripheral eosinophilia that may be a marker for adverse cutaneous drug reactions.[5] These data would have been useful to better define the diagnosis: in presence of HHV-6 or HHV-7 reactivation addressing toward PR and, conversely, in presence of peripheral blood eosinophilia toward PR-like eruption caused by ibrutinib.

Francesco Drago, MD, Giulia Ciccarese, MD, and Aurora Parodi, MD

Table I. Clinical, histopathologic, and virologic criteria to distinguish PR from PR-like eruption[2-5]

	Classic PR	PR-like eruption
Pathogenesis	Sporadic HHV-6/7 systemic reactivation	Reaction to a drug/vaccine
Morphology of the lesions	Finely scaling erythematous macules and/or plaques	Dusky-red macules and/or plaques with possible desquamation
Distribution	Involvement of the trunk and limbs (face spared): lesions symmetrically oriented with their long axes along the cleavage lines (theater curtain distribution)	Diffuse and confluent lesions on trunk, limbs and face
Oral mucosa involvement	Possible (16% of cases)	Possible (50% of cases)
Herald patch	Present (12%-90% of cases)	Absent
Itch	Absent or mild	Intense
Prodromal symptoms	Present (>69% of cases)	Absent
Laboratory exams	Within normal ranges	Possible peripheral eosinophilia (42% of cases)
Virologic investigations	Signs of HHV-6 and/or HHV-7 systemic reactivation: detection of HHV 6/7 DNA in plasma and peripheral blood mononuclear cells; detection of positive IgM antibodies against HHV-6/7 in serum.	No signs of HHV-6 and HHV-7 systemic reactivation
Histopathology	Parakeratosis, spongiosis (epidermis); extravasated red blood cells, lymphocyte infiltrate (dermis)	Interface dermatitis and eosinophils
Therapeutic options	Bed rest	Drug withdrawal
Mean duration	45 day	14 days after discontinuing the drug

DISSAL Department of Dermatology, Policlinico San Martino, Genoa, Italy

Funding sources: None.

Conflicts of interest: None disclosed.

Correspondence to: Giulia Ciccarese, MD, DISSAL Department of Dermatology, Policlnico San Martino, Largo Rosanna Benzi 10, 16132 Genova, Italy

E-mail: giuliaciccarese@libero.it

REFERENCES

1. Bitar C, Sadeghian A, Sullivan L, et al. Ibrutinib-associated pityriasis rosea-like rash. *JAAD Case Rep*. 2017;4:55-57.
2. Drago F, Broccolo F, Agnoletti A, et al. Pityriasis rosea and pityriasis rosea-like eruptions. *J Am Acad Dermatol*. 2014;70:196.
3. Drago F, Ciccarese G, Rebora A, et al. Pityriasis rosea and pityriasis rosea-like eruption: can they be distinguished? *J Dermatol* 2014;41:864-865.
4. Drago F, Ciccarese G, Rebora A, et al. Pityriasis rosea: a comprehensive classification. *Dermatology*. 2016;232:431-437.
5. Drago F, Cogorno L, Agnoletti AF, et al. A retrospective study of cutaneous drug reactions in an outpatient population. *Int J Clin Pharm*. 2015;37:739-743.

https://doi.org/10.1016/j.jdcr.2018.04.002