Generalized pustular psoriasis triggered by Zika virus infection

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Summary

Zika virus is an emerging arbovirus, which is expanding in epidemic proportions through tropical and subtropical areas of the world. Although Zika is linked to a number of congenital and neurological complications, there is scarce knowledge on the impact of ZIKV infection in human skin. We report the case of a 68-year old woman who presented with generalized pustular psoriasis after a preceding and otherwise uneventful episode of ZIKV infection. Based on recent experimental data on the biology of ZIKV infection in the cutaneous environment, we speculate that ZIKV may have directly triggered the development of generalized pustular psoriasis by stimulation of keratinocyte-derived mediators of inflammation and a polyfunctional T-cell driven immune reaction in the cutaneous milieu.

Zika virus (ZIKV) is an emerging arthropod-borne virus belonging to the Flaviviridae family,1 which is expanding in epidemic proportions through tropical and subtropical areas around the world.1 Transmission is predominantly vector-borne (mainly by Aedes mosquito species), although nonvectorial transmission (maternal–fetal, sexual, transfusion-related) has gained particular relevance during the pandemic.1 The clinical presentation of ZIKV is nonspecific, and it is often misdiagnosed with other classic viral exanthems and arboviral infections such as Chikungunya (CHIKV), Dengue and Mayaro,1,2 thus posing a challenge at the time of diagnosis. While ZIKV is mostly asymptomatic, the classic signs and symptoms of infection include mild fever, headaches, fatigue, rash, arthralgia, myalgia, and conjunctivitis.1,2 The emergence of ZIKV has been linked to the development of a number of clinical complications, mainly congenital and neurological,1 yet, besides its self-limiting pruritic maculopapular rash, little is known about the biology and cutaneous manifestations of ZIKV disease.

Infections are among the well-known triggers of psoriasis.3 We report an exceptionally interesting case of psoriasis presenting 3 weeks after an otherwise uneventful resolution of acute ZIKV infection.

Report

A 68-year-old woman with no personal or family history of psoriasis presented with a 10-day history of generalized erythema and sharply marginated scaly plaques of acute onset. She also reported general malaise, fever and localized tenderness. Three weeks previously, she had developed a pruritic maculopapular rash along with asthenia, small joint arthralgias and conjunctival hyperaemia, which resolved uneventfully after 5 days. At that time, full blood count (FBC) and blood chemistry results were unremarkable except...