



Correspondence

Zika virus infection as a trigger of atopic dermatitis



The article by Cosme-Blanco et al on Zika virus infection as a trigger of atopic dermatitis is of much interest.¹ In fact, virus-induced atopic dermatitis in general is a very relevant clinical issue. Some viral infections (such as hepatitis B and measles virus) have been associated with onset of atopic dermatitis.^{2,3} Typically, arbovirus blood infections involve leukocytes and, only rarely, skin cells. The interrelationship between arbovirus infection and atopic dermatitis has not been reported. Dengue fever, an infection similar to that of Zika virus, has had some dermatologic presentations reported, yet atopic dermatitis was not among them. Because Zika virus infection is typically asymptomatic⁴ and can occur with other comorbidities, the finding of atopic dermatitis with Zika may be only a coincidence. Further reports of this association would be most welcome.

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Urticarial vasculitis and autoimmune thyroid disease: Do we have enough data?



We read the original article, “Urticarial vasculitis and associated disorders,” by Hamad et al.¹ In this noteworthy article, the investigators stated that several autoantibodies, including antimicrosomal antibodies, might be detected in patients with hypocomplementemic urticarial vasculitis (HUV) and HUV syndrome, 2 variants of urticarial vasculitis (UV). They provided 2 references to support this statement. We searched for these 2 references and deeply explored the medical literature, and we could not find a conclusive source to confirm or deny that microsomal antibodies are present in UV.

The first referenced publication, in which Zuberbier and Maurer² described UV and Schnitzler syndrome in detail, highlights the presence of antimicrosomal antibodies as a clinical feature that might be found in patients with UV. For such purposes, they cited 2 other publications: one corresponds to the eighth chapter in a text on urticaria by Czarnetzki³ and the other is a histopathologic and clinical review of 72 cases by Mehregan et al.⁴ We carefully analyzed these references and noticed that in the study by Mehregan et al⁴ the presence of thyroid microsomal antigens as a clinical finding in patients with UV was not reported. Moreover, when

reading the eighth chapter of the text on urticaria by Czarnetzki,³ we did not find anything about thyroid microsomal antigens being present in patients with UV.

In the second referenced article, we did not find anything to support the statement that microsomal antibodies might be present in HUV. However, in this work, Buck et al⁵ briefly described a possible pathogenesis mediated by anti-C1q antibodies.

Currently, it is known that chronic spontaneous urticaria is associated with autoimmune thyroid disease, as suggested by a systematic review in which patients with chronic spontaneous urticaria presented significantly higher levels of immunoglobulin G (IgG) antithyroid antibodies (AABs) than the normal population.⁶ However, the significance of this same analysis is lost when patients with chronic spontaneous urticaria are compared with those with UV, as suggested by the study by Akarsu et al,⁷ which could be explained by the fact that thyroid antibodies are frequently present in patients with UV. In addition, from 2002 to 2005, we explored the etiology of chronic urticaria in a study involving 161 Latin-American patients. We found 20 cases (12%) consistent with UV and 9 (6%) consistent with autoimmune thyroid disease. Diagnosis of autoimmune thyroid disease was established by plasma levels of autoantibodies against thyroid peroxidase (IgG-anti-TPO) and thyroglobulin (IgG-anti-TG) above the reference range.⁸ Six female patients (28.5%) with UV were positive for IgG-anti-TPO

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and IgG-anti-TG above the normal range. Overall, patients with UV were approximately 12 times more likely to have high titers of AABs than the general population.

All these data concur with the description provided by Hamad et al,¹ although the cited references are not accurate enough. There are insufficient data to demonstrate an association of UV with thyroid disease. We suggest further research to confirm the presence of AABs as a clinical feature in patients with UV. Reassessment of thyroid function and AAB levels in such patients is recommended, because increased levels of IgG-anti-TPO and thyroid-stimulation hormone have been shown to predict future development of hypothyroidism in the euthyroid population.⁹

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Authors' response



We thank the authors for placing a spotlight on the association between autoimmune thyroid disease (AITD) and urticarial vasculitis (UV). Our review was a brief and compact summary of UV and was not intended to explore the relation between thyroid disease and UV.¹ The authors point to published studies that suggest UV could be associated with AITD. In the data from the authors' study of 161 patients with chronic urticaria, 12% had findings "consistent" with UV and 9% had findings consistent with AITD. The authors concluded that patients with UV were 12 times more likely to demonstrate AITD serologically. This needs to be confirmed in larger studies.

There have been suggestions that AITD might be associated with a plethora of other autoimmune disorders, including chronic urticaria (an association that is better established) and certain forms of vasculitis. There are various reasons to suspect that an association between UV and AITD could be of importance. Sharing of etiologic factors (such as hormones, sex, infectious illness, and environmental toxins) and genetic-molecular pathways (danger-associated and pathogen-associated molecular patterns) could be possible.² Some investigators have described a mosaic of autoimmunity complicating AITD,³ whereas others have pointed to a coexistence of AITD with other autoimmune conditions⁴ (such as lupus, primary Sjögren syndrome, or rheumatoid arthritis) or vasculitis (such as vasculitis associated with antineutrophil cytoplasmic antibodies or UV).⁵

The clinical significance of thyroid testing in UV, other than the finding of subclinical thyroid disease that might require intervention,

is unclear and it appears unlikely that treatment of AITD alone could lead to remission of UV. As suggested by the authors, a prospective multicenter study of AITD disease prevalence and intervention in the vasculitides might shed more light on the association.

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