Drug-associated aquagenic wrinkling of the palms in an atopic male patient

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DESCRIPTION

A 19-year-old male patient presented with a 2-week history of intensely pruritic white papules and mild wrinkling of the skin of both his palms (figure 1). Other body sites were unaffected. The skin lesions developed during showering and completely resolved by itself within 10–15 min afterwards. Before onset of symptoms, the patient started medication with paracetamol, ascorbic acid and clarithromycin because of an upper respiratory tract infection. His medical history was unremarkable except for mild atopic eczema, asthma and rhinoconjunctivitis with sensitisation to environmental allergens. Clinical findings and the unambiguous association to water contact were consistent with aquagenic wrinkling of the palms (AWP). AWP gradually disappeared within 10 weeks after discontinuation of drugs.

The epidemiology and pathogenesis of AWP remains unclear. Only a few cases are described, usually in patients with cystic fibrosis. AWP supposedly is triggered by mutations in the cystic fibrosis transmembrane conductance regulator gene with production of hypertonic sweat and a subsequently increased water influx into eccrine gland ducts.[1] However, AWP may occur in patients without clinical signs or history suggesting cystic fibrosis, as in our patient. In these patients, drugs such as aspirin or COX inhibitors may play a triggering role for AWP, supposedly due to drug-induced dysregulation of skin aquaporins.[1 2] AWP in our patient was supposedly induced by an antipyretic and/or antibiotic medication. Paracetamol as a possible trigger for AWP has not been described, yet. The impaired skin barrier in the atopic patient might have served as the aggravating factor.

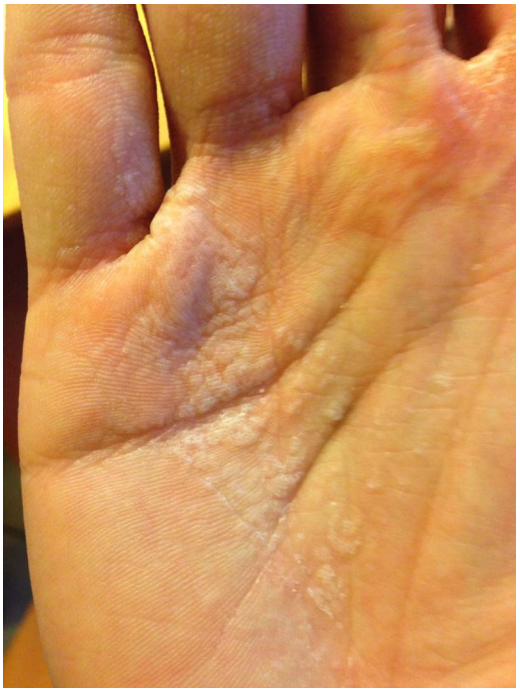

Figure 1 Right palm of the patient with white papules and mild wrinkling.

Learning points

- Aquagenic wrinkling of the palms is characterised by intensely pruritic white papules and mild wrinkling of the skin after water contact.
- It can be associated with the intake of drugs.
- Impaired skin barrier in atopy might serve as a triggering factor for the development of aquagenic wrinkling of the palms.

Contributors MG was involved in the medical care and in the diagnostic workup of the patient. He wrote the main part of the manuscript. RRM was responsible for the medical care of the patient at the initial visit and during follow-up and made the diagnosis. He critically reviewed the submitted manuscript version.

Competing interests None.

Patient consent Obtained.

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