

A New Trigger for Aquagenic Wrinkling: Isotretinoin

Sir,

Aquagenic wrinkling of the palms, formerly known as aquagenic keratoderma, is a rarely seen dermatosis predominantly in young females, featured by transient whitish papules in the palmar area after water immersion. Both acquired and hereditary cases have been reported since its first description in 1996.^[1,2] Drugs including gabapentin, rofecoxib, celecoxib, aspirin, tobramycin, and spironolactone have been implicated in the formation of this entity.^[3]

Herein, isotretinoin is presented the first time as a cause of aquagenic wrinkling of the palms in a young patient.

A 20 years old female presented to our dermatology outpatient department with a complaint of wet, whitish, pruritic papules on her palms while she is on isotretinoin treatment 20 mg daily for acne vulgaris. On history taking, the patient stated wrinkling of her both palms more on the left hand, after exposure to water a few days after she had started taking isotretinoin [Figure 1]. The plantar area was not affected. After stopping isotretinoin intake, she observed a spontaneous improvement of those lesions within days, and no recurrence on further contact with water. There was no another adverse effect related to isotretinoin. She experienced this event many times after the intake of isotretinoin. The patient is otherwise healthy



Figure 1: Whitish, coalesced papules in the palmar area

and has no sign and history of cystic fibrosis. She denied any other drug or herbals and family history. Based on this clinical data, she was diagnosed with acquired aquagenic wrinkling of the palms triggered by isotretinoin.

Isotretinoin has many side effects, sometimes reported as individual cases during the 30 years it has been in clinical use. It is surprising to see such a reaction as this drug has mainly a drying effect on skin and mucosa.^[4] Aquagenic wrinkling was not reported as a side effect of isotretinoin so far.

This entity is generally observed in young female patients like our case. The exact mechanism is not known; however, skin barrier function and water absorption balance may have been broken during isotretinoin treatment. Some authors have pointed it out as the disorder of the autonomic nervous system and have focused on the association of this disease with the increase in sympathetic activity.^[5] In this respect, the sympathetic activity, which is already increased in acne patients, combined with the possible synchronizing effect of isotretinoin could cause such an exaggerated response resulting in wrinkling of palmar skin.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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