

Aquagenic Wrinkling of the Palms



To the Editor:

A 47-year-old Japanese woman presented with blanching and whitening of both palms after bathing and washing dishes for the past 20 years. It was induced by immersion of hands in water for about 5 minutes. She did not report any pain or itching. Her medical history and medications were unremarkable. Physical examination revealed a temperature of 36.5°C, pulse



Figure 1 The left palm before exposure to water.



Figure 2 A 5-minute water immersion test induced wrinkling of the palm.

rate of 74 beats per minute, blood pressure of 111/67 mm Hg, and respiratory rate of 12 breaths per minute. A 5-minute water immersion test induced wrinkling of the palms (Figures 1 and 2), which led to the diagnosis of aquagenic wrinkling of the palms (AWP). Because the patient was asymptomatic, she chose not to receive treatment.

AWP, also known as aquagenic keratoderma, is a rare dermatosis characterized by hyperwrinkling of the palms with white papules induced by water immersion.¹ The disease is usually asymptomatic; however, patients sometimes present with painful and pruritic sensations. This condition was first reported in 1974 in a patient with cystic fibrosis, and it has been suggested to be linked to cystic fibrosis and marasmus to date.² AWP has also been reported to be associated with drugs, such as cyclooxygenase inhibitors, angiotensin-converting enzyme inhibitors, and aminoglycoside antimicrobials in some cases.^{1,3} Our patient was not related to any of the etiologies and was considered to be idiopathic. AWP is diagnosed when palmar maceration and the appearance of white

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papules are confirmed after soaking both palms in water for 2 to 5 minutes (hand-in-bucket sign).⁴ There is no established treatment for AWP; however, topical sweating inhibitors (aluminum chloride) and botulinum toxin injections are used in cases with strong subjective symptoms.⁵

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