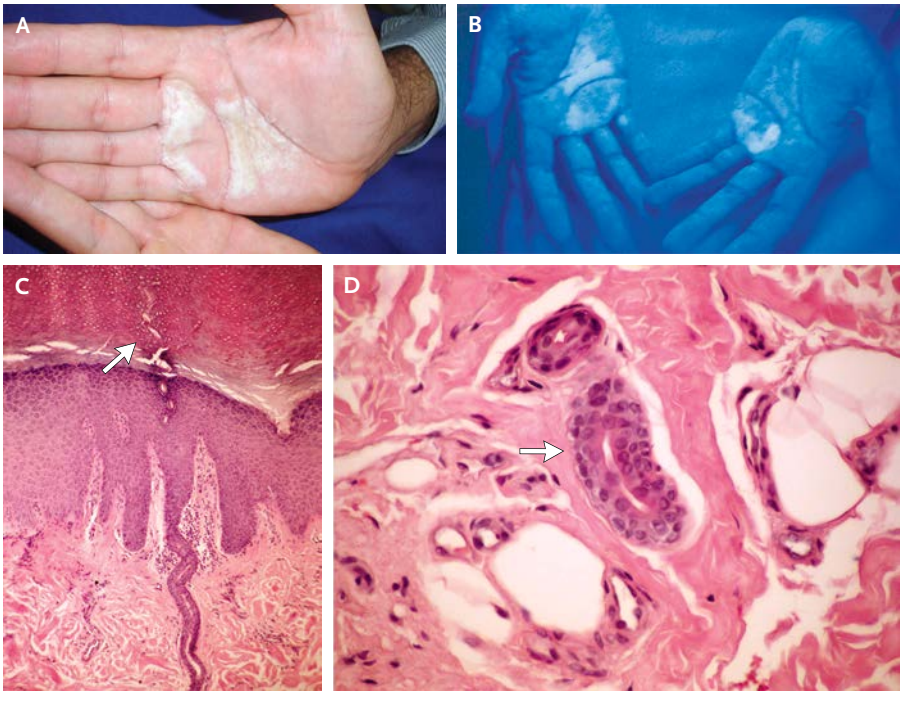
IMAGES IN CLINICAL MEDICINE

Lindsey R. Baden, M.D., *Editor*

Aquagenic Keratoderma



Eduardo David Poletti, M.D.
Rocío Muñoz-Sandoval, M.D.

Universidad Autonóma de Aguascalientes
Aguascalientes, Mexico
drpoletti@dermanorte.com.mx

A 44-year-old otherwise healthy man presented with thickening of his palms after their immersion in water, accompanied by burning pain, pruritus, and edema. Onset was at 37 years of age. The patient had no family history of similar skin findings and said that he did not have a history of hyperhidrosis, thyroid disease, or medication use. Physical examination after the patient held a piece of gauze soaked in water for 2 minutes revealed hypopigmented, translucent papules and plaques in both palms (Panel A). The lesions became more evident when examined with a Wood's lamp (Panel B). A skin-biopsy specimen showed orthohyperkeratosis of the stratum corneum, dilatation of intraepidermal eccrine ducts (Panel C, arrow), and hyperplasia of the eccrine sweat glands (Panel D, arrow). A sweat chloride test was normal. The patient received a diagnosis of aquagenic keratoderma, an unusual condition characterized by transitory, flat-topped papules and plaques, with hyperwrinkling and eccrine-duct prominence on the palms and fingers and, in rare cases, the soles, induced by exposure to water. Aquagenic keratoderma is more frequent in women than in men and has been associated with a heterozygous mutation in the cystic fibrosis gene. The patient was treated with subcutaneous injections of botulinum toxin, with prompt improvement of his symptoms.

DOI: 10.1056/NEJMicm1314806