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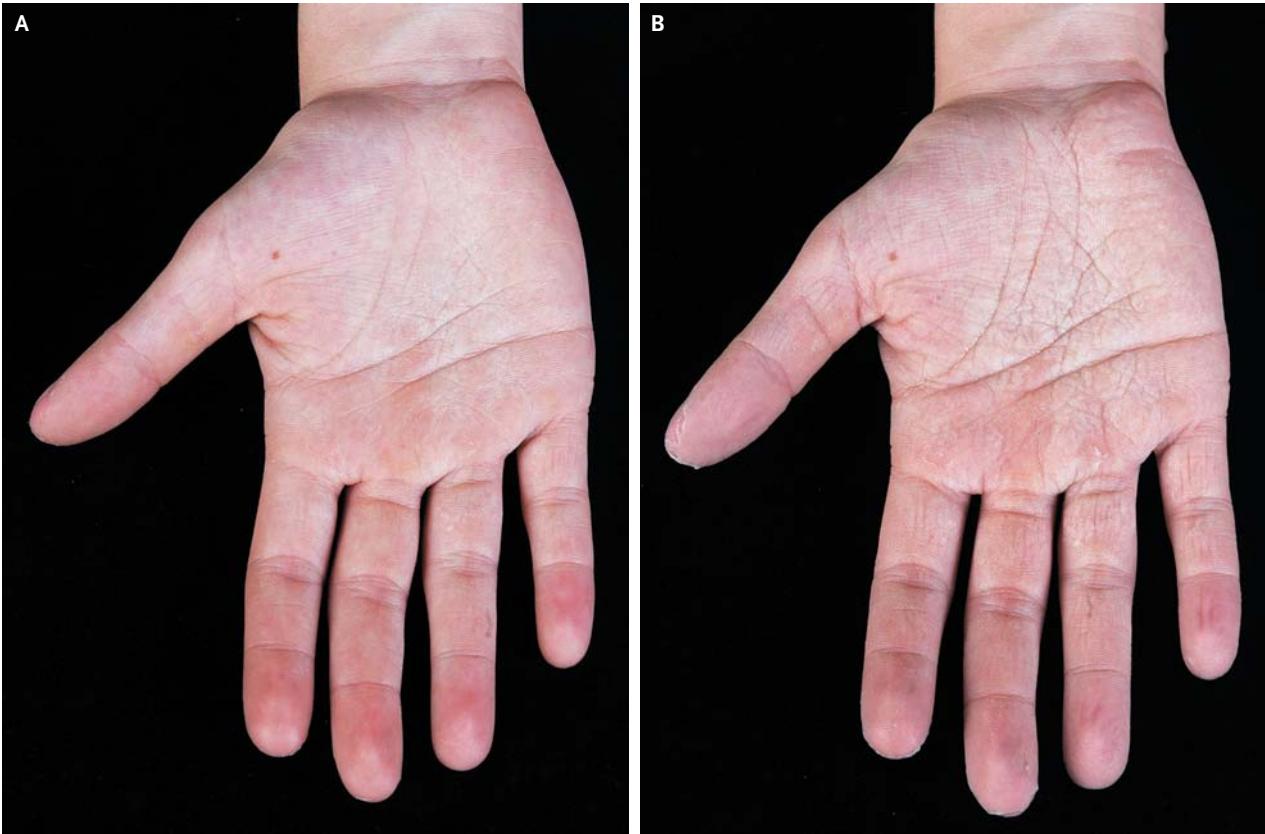
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Aquagenic Wrinkling of Palms in Cystic Fibrosis



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A 17-YEAR-OLD GIRL PRESENTED WITH A 10-YEAR HISTORY OF TRANSIENT excessive wrinkling of her palms after brief exposure to water and sweating. She reported some uncomfortable tightness of the skin during these episodes. At the age of 2 years, the patient had received the diagnosis of cystic fibrosis with homozygosity for the F508 mutation in the gene encoding cystic fibrosis transmembrane conductance regulator (CFTR). On examination her skin was unremarkable apart from mild thickening of the central palms (Panel A). After immersion of her hands in water for 3 minutes, numerous white translucent papules and marked wrinkling of both palms appeared (Panel B). These findings were consistent with the diagnosis of aquagenic palmar wrinkling or aquagenic palmar keratoderma in cystic fibrosis. Though this condition can occur both in patients with cystic fibrosis and in mutation carriers, it tends to develop in carriers approximately 7 minutes after exposure, as compared with 2 to 3 minutes among homozygotes. As the diagnosis of cystic fibrosis broadens to include patients with a mild disease phenotype, aquagenic palmar wrinkling may be the initial presenting sign among otherwise healthy patients. The patient was advised to avoid exposure to water and humidity.

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