

# Aquagenic Wrinkling of the Palms in a Patient with Cystic Fibrosis

## Queratodermia Aquagénica num Doente com Fibrose Quística

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Figure 1 – Whitish and hyperkeratotic papules on both palms, predominantly on the left hand (A). Worsening of right palmar lesions after five minutes of water immersion (B).

A 16-year-old female patient with cystic fibrosis (CF) presented with asymptomatic palmar lesions with five months of evolution. She reported worsening after water exposure and palmar hyperhidrosis.

A physical examination revealed whitish, hyperkeratotic papules on both palms. The patient's right hand was immersed in water for five minutes, followed by worsening of lesions with evident wrinkling and edematous whitish papules – the 'hand-in-bucket' sign (Fig. 1). A diagnosis of aquagenic wrinkling of palms (AWP) was established. Topical aluminum chlorohydrate was initiated, with modest improvement.

Aquagenic wrinkling of palms association with CF is well established, and a diagnosis of AWP should prompt CF investigation, as it may represent the only sign of mild CF or carrier status, allowing early diagnosis. 1-3 Less common associations include drugs (such as acetylsalicylic acid and selective cyclooxygenase inhibitors) and hyperhidrosis. 4-6 The diagnosis is clinical and the 'hand-in-bucket' sign is pathognomonic. 5.6 Treatment focuses on avoiding water exposure and managing hyperhidrosis with topical aluminum chlorohydrate or botulinum toxin. 4-6

### **AUTHOR CONTRIBUTIONS**

All authors contributed equally to this manuscript and approved the final version to be published.

### PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

### **DATA CONFIDENTIALITY**

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

### PATIENT CONSENT

Obtained.

### **COMPETING INTERESTS**

The authors have declared that no competing interests exist.

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