Aquagenic palmar keratoderma in 2021: A case report

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Introduction

Aquagenic palmar keratoderma (APK) is a rare entity characterized by the apparition of translucent papules and a rumpled aspect of the hand after immersion in water [1,2]. Most patients are young women [1].
The etiology is unknown, but it may be associated with mutations in the CFTR gene, found in cystic fibrosis [1,3]. We report a new case of APK.

Observation

A 22-year-old woman presents an asymptomatic eruption when her hands come into contact with water disappearing spontaneously after about 30 minutes. She has no specific medical history. The physical examination of the hands only revealed hyperhidrosis. But after a few seconds of immersion in water, whitish papules and an edema appeared (fig 1, 2, 3), characteristic of APK.

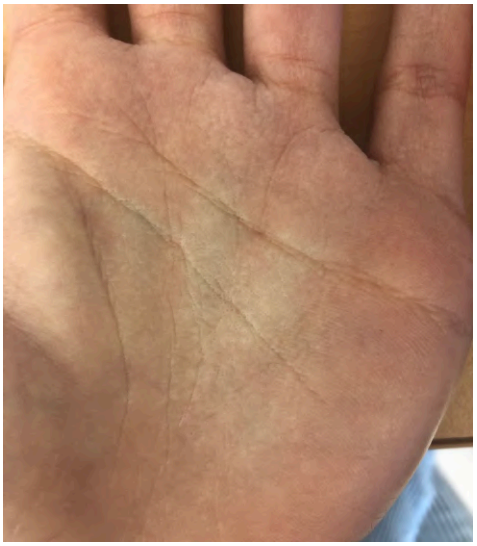

Fig. 1

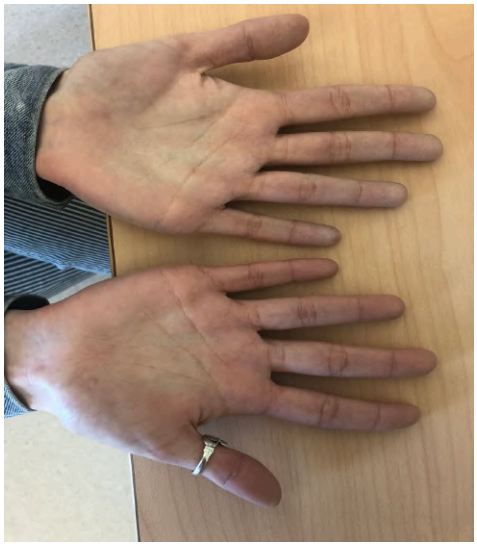

Fig. 2

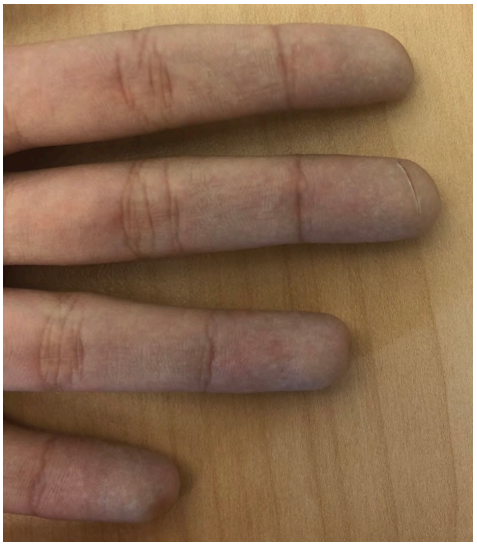

Fig. 3

Discussion

Diagnosis of APK is clinical but histologic examination of a biopsy on wet skin shows an orthokeratotic hyperkeratosis and a hyperplasia of the eccrine sweat glands [1]. It can occur in people with a mutation in the CFTR gene (either patients with cystic fibrosis or heterozygous carriers of a mutation) [1,3] as well as in healthy people. In the later, a trigger such as angiotensin inhibitors or nonsteroidal anti-inflammatory agents is often present [4]. Since the COVID-19 pandemic, several studies have hypothesized that frequent hand washing could be also a trigger for APK [4,5]. Many treatments can be proposed, although their effectiveness remains limited: aluminum chloride, iontophoresis or injection of botulinum toxin in more disabling cases [1,2].

Conclusion

APK is a rare disease that should not be underdiagnosed especially during this pandemic period. The dermatologist has an important role in the detection of this pathology allowing a rapid referral to geneticians and internists to exclude a mutation of the CFTR gene.

References:
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