

Aquagenic syringeal acrokeratoderma localized to palmar creases

ABSTRACT

Aquagenic syringeal acrokeratoderma (ASA) is a rare acquired condition of uncertain etiology, characterized by development of translucent papules and plaques involving the palmar surface, after 2–4 min of exposure to water. Several pathogenic mechanisms have been proposed, including structural or functional defects of the stratum corneum, primary disease of the sweat ducts, increased sodium concentration in the skin, or a reaction to drugs.

This case is about a 21- year old female with migraine on flunarizine tablet for the past 1 year, who presented with whitish translucent papules and plaques along the palmar creases after exposure to water for 2–3 minutes. Palmar lesions on exposure to water developed 5 months after starting flunarizine. Dermoscopy of lesions revealed whitish elevations with dilated sweat duct openings and histopathology showed dilated acrosyringium in the stratum corneum and proliferation of eccrine glands in the dermis.

The patient was diagnosed with Aquagenic syringeal acrokeratoderma. Neither the patient nor any of the close family members had similar lesions. There were no clinical features suggestive of cystic fibrosis. Based on the World Health Organization-Uppasala Monitoring Centre causality assessment, flunazirine was considered the possible cause of ASA. Flunarizine was stopped and she was treated with 20% aluminum chlorohydrate and antihistamines, showed partial improvement. She was reassured that the condition is transient and benign.

Unlike the previously reported cases, this patient developed lesions along the palmar creases, cause of which is unknown. Furthermore, the association of ASA with migraine or flunarizine has not been reported previously. Flunarizine is a non-selective calcium antagonist, which has also been shown to block voltage-gated sodium channels, which may affect ASA by blocking the cell surface channels and receptors. Further research is needed to understand the pathomechanisms of this condition. Though benign in nature, an awareness about this rare disease among dermatologists is important in order to make a prompt diagnosis.