

Brown palm pseudochromhidrosis

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Case Reports

Case no. 1

A 63-year-old Japanese man presented with brown sweating from his palms for 2 days. He was a company president and denied touching any agent that might have caused the deposition of any pigments. He had no habitual or occupational opportunities to use any dyes, pigments or metals, except for having applied an ointment for tinea pedis the day before the onset. Examination showed brown pigmentation on the palms (Fig. 1). Wiping with an ethanol-soaked cotton swab could remove the colour from the palms. The soles of the feet were not involved. The colour disappeared within a week and no recurrence was observed over a 2-month period.

Case no. 2

A 36-year-old Japanese man presented with brown discoloration of his palms of 2 days' duration. It was a pale-brown colour on the first day and he was able to wipe it away with a cloth. It became darker afterwards and the pigment could only be removed to a limited degree. He also denied any causative agent such as hair-dye, pigment, or metal, except for having eaten *senmai*, 'stomach' of beef at a Korean-style barbecue restaurant the night before the onset. Physical examination showed diffuse brown pigmentation exclusively on the palms, which gave off a smell of something burning. Wiping with an ethanol-soaked cotton swab could partially remove the colour from the

palms. His face was slightly brownish and wiping with gauze could remove a dark-brown pigment. There was no apparent pigmentation on the soles of the feet. Clearing of the colour was observed on the 5th day and there was no relapse for a month.

Several months later, telephone interviews revealed that both patients had accidentally wiped their hands with the same kind of self-tanning tissues, which closely resembled ordinary wet tissues. They habitually used wet tissues to wipe their hands, but at that time they had applied self-tanning tissues by mistake because the packages were indistinguishable (Fig. 2). Thus, it was eventually clear that pigmentation of the palms had been caused by the wet-tissue type of self-tanning product.

Discussion

Chromhidrosis (coloured sweat) is an exceedingly rare disorder of the apocrine sweat glands, frequently localized to the face or axilla (1, 2). Eccrine chromhidrosis is caused by colouring of the clear eccrine sweat by dyes, pigments or metals on the skin surface. Pseudochromhidrosis is caused by an exogenous colouring agent. Red sweat was seen in flight attendants from the red dye in the labels on life-vests (3). A detailed investigation of the environment and life-style of the patient may reveal the use of dyes, paints or other chemicals that might temporally correlate with the symptoms. Because of increasing awareness of the detrimental effects of solar irradiation on the skin, though a tanned look is still in



Fig. 1. Brown pigmentation exclusively on the palms of patient no. 1.



Fig. 2. Self-tanning tissues used by both patients, which closely resembled ordinary wet tissues.

fashion, various sunless tanning formulations have become widely available. Most of these contain dihydroxyacetone, which binds to the proteins of the stratum corneum and imparts a brown colour to it (4). Their accidental use may cause unexpected effects.

References

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