Letter to the Editor

Asymptomatic pigmentation of the skin in a child: baby wipes, once again

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Wet wipes are commonly used for children hygiene to clean skin in diaper area; their practicality of use extends the application to hands and face, resulting in repeated daily use. Therefore, it is extremely important that their chemical composition is safe and mild on a baby's sensitive skin;However, in recent years many cases of allergic and irritant contact dermatitis due to baby wipes have been reported (1). We describe an unusual case of transient pigmentation of the skin in the skin area cleaned with a common Italian wipes brand.

A 2-year-old baby presented with a well-demarcated orange-brown pigmentation of the skin without other skin lesions or symptoms. Her mom reported the recent onset, firstly on buttock and thighs and then on the dorsal surface of the right hand (Fig.1, 2); also, the clothes worn by the child were stained with the same color. The history revealed the frequent use in these skin areas of baby wipes

containing natural plant extract. The producer, following numerous similar reports, withdrawn the product from the market and explained the effect with the presence of caproic aldehyde. Recently,

Fig. 1. *Sharply demarcated pigmentation of the legs.*

Fig. 2. *Pigmentation of baby's hand skin.*

the wipes had been reformulated with the addition of Opuntia ficus-indica stem extract. The skin pigmentation gradually disappeared in about 7 days with daily cleansing and rubbing with a sponge. We believe that caproic aldehyde is not the direct cause of pigmentation; in fact, this element is volatile and the cause of "a strange smell" reported by the mother is highly probable (2). The prickly pear cactus Opuntia ficus-indica is a tropical and subtropical plant with moisturizing properties and a demonstrated wound healing ability (3). The chemical analysis of stems has proved the presence of several compounds, among which there are vitamin A and β-carotene (4), well-known as skin colorants (5). In our opinion, the traces of caproic aldehyde present, demonstrates an unstable formula that probably has increased the pigmentation ability of Opuntia, also favored by the presence of gluconolactone as second ingredient. This case emphasizes the relevance of a correct formulation in childcare products.

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