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### COMPLICATIONS OF ALLERGIC REACTIONS TO TEMPORARY TATTOOS

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Temporary henna tattoos are popular, even among young children. In contrast to the body pastes used by Hindus and Muslims, consisting solely of henna, they may illegally contain high concentrations (up to 30% or more!) of para-phenylenediamine (PPD) and derivatives to let the tattoo dry faster and make it darker and longer acting. However, the latter chemicals are strong sensitizers in hair dyes of the oxidative (permanent) type, responsible for allergic contact dermatitis in hairdressers and consumers (even though the maximum EU permissible concentration is 3 % when applied as a mixture).

An allergic reaction to a temporary tattoo usually presents as vesicular and even bullous eczema at the contact site, but also erythema-multiforme like and lichenoid reactions may occur. The dermatitis usually appears after 10 to 14 days following the application (when the color is fading), persists rather long, and may spread to other body parts. In previously sensitized subjects, the skin lesions may already occur after 1 to 3 days following the tattoo application.

Healing occurs frequently with post-inflammatory long-lasting hyper-pigmentation or depigmentation.

Para-phenylenediamine does cross react with many substances present in our environment, such as chemically related hair and textile dyes, local anesthetics of the ester type (e.g. benzocaine), sunscreens (p-aminobenzoic acid), and certain plastic and rubber compounds. The consequences of this illegal practice are serious and may even compromise the later career of the sensitized subject.