

# Temporary transfer tattoos, often used by children, can disrupt the skin's protective barrier function

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Temporary transfer tattoos, particularly popular among children, can damage the skin's protective barrier. This is the finding of a study

published in the *Journal of Clinical Medicine* by UGR researchers José Pablo Serrano, Trinidad Montero, Agustín Buendía, and Salvador Arias.

Their study analyzed the dermatological effects of permanent tattoos, produced using needles that penetrate the skin, and those of temporary transfer tattoos. The latter, explains José Pablo Serrano, are the most damaging: "The results showed that skin to which transfer tattoos had been applied presented [lower temperatures](#), poorer hydration of the stratum corneum (epidermis), and worse overall antioxidant capacity, compared to non-tattooed skin controls."

The levels of transepidermal water loss were higher in the case of transfer tattoos compared to non-tattooed skin, which may indicate that there is a certain degree of damage to the skin's epidermal protective barrier.

These specialists warn that temporary transfer tattoos should be used with caution, especially in the case of patients suffering from some kind of skin damage, such as those affected by psoriasis or atopic dermatitis.

The study adds a new component to the [scientific literature](#), since most of the [adverse reactions](#) related to tattoos that have been described are associated with permanent ones and are usually due to problems such as infections, granulomas, or [allergic reactions](#) caused by the pigments used or the tattooing procedure itself. In addition, other types of temporary tattoos, such as henna-based, which were not analyzed in this study, have been associated with a large number of adverse allergic reactions.

## **Impact of permanent tattoos**

So what are the effects of permanent tattoos? Serrano points to the "traumatic process of tattooing" that is capable of causing "adverse skin reactions." However, according to this study, permanently tattooed skin

does not differ significantly from non-tattooed [skin](#). "We concluded that permanent tattoos do not seem to significantly affect the function of the epidermal barrier, something that transfer tattoos do," explains Serrano.

Given that in general, the tattooing process is "traumatic and not without its complications," as the specialists explain, they recommend exercising caution before deciding to get a tattoo. It is essential to read all the available information about the possible risks of infection or allergy, and also to choose professional parlors that offer [quality standards](#) and first-rate hygiene that help minimize these risks. "It would also be helpful to know which type of pigments they intend to use for your tattoos and any allergenic potential that these might have," Serrano advises.

The experts conclude that anyone thinking about getting a [tattoo](#) and wanting advice on the possible dermatological effects should always consult a dermatologist first.

Provided by University of Granada

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