Dos pacientes pediátricos con dermatitis alérgica de contacto a clorhexidina

**Patient 1:** A 5-year-old girl with no history of allergy.

**Patient 2:** A 2-year-old boy with generalized eczema.

![Images of skin lesions](image1.png)

**Figure 1:** Vesicular lesions on the knee (Patient 1).

**Figure 2:** Positive results in open test (upper) and semiclosed tests (lower).
and 10% in water and chlorhexidine 0.5% in water yielded positive results to chlorhexidine at 48 and 96 hours. When antiseptic with chlorhexidine was suspended, the patient did not develop further lesions. The parents decided not to continue with the study.

Chlorhexidine is a topical fungicidal and bacterial antiseptic that has been widely used in health care since 1954, generally in the form of digluconate, aqueous solutions, or alcohol-based solutions. It is used for hand washing, hygiene of hospitalized patients, presurgical antiseptic baths, and disinfection of the surgical area. It is also applied before placement and care of catheters and may be used to impregnate medical devices (e.g., cannulas, dressings, catheters). Furthermore, in recent years, chlorhexidine has been increasingly used as a biocide in all types of cosmetic products.

Chlorhexidine can lead to local irritation. Other adverse effects, such as tooth discoloration and fixed drug eruption, are less common. In addition, chlorhexidine can potentially cause allergic contact dermatitis, photosensitization, urticaria, and anaphylaxis. Some patients experience both immediate and delayed hypersensitivity reactions; therefore, even mild to moderate allergic dermatitis may indicate a potential risk of severe immediate-type reactions during subsequent exposure to chlorhexidine in this population.

However, the sensitizing capacity of chlorhexidine is poor despite the frequency of its use. Series of patients assessed using patch tests show that between 0.5% and 13.1% are sensitized to chlorhexidine, although in Europe, 1% is a more realistic prevalence. The appropriate concentration for testing chlorhexidine has not been established. A concentration of 0.5% is probably more appropriate than 1%, since it leads to fewer irritant reactions.

We report the cases of 2 children with allergic contact dermatitis to chlorhexidine, in 1 of whom sensitization was shown to be immediate. In patients with a positive patch test result to chlorhexidine, the workup should be completed with skin tests in order to assess the possibility of immediate-type allergic reaction. Furthermore, in the case of a patient with urticaria or anaphylaxis during medical or dental treatments, chlorhexidine should be considered a possible trigger, alongside latex, anesthetics, and other drugs.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

References


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