

Contact urticaria caused by chamomile in a wet wipe

Francisco J. Navarro-Triviño¹ | Ángela Ayén-Rodríguez² | Ricardo Ruiz-Villaverde²

¹Department of Contact Eczema and Immunoallergic Diseases, Dermatology, Hospital Universitario San Cecilio, Granada, Spain

²Department of Dermatology, Hospital Universitario San Cecilio, Granada, Spain

Correspondence

Dr Francisco J. Navarro-Triviño, Hospital Universitario San Cecilio, Granada, Avenida de la Ilustración, s/n CP 18016, Granada, Spain.

Email: fntmed@gmail.com

KEYWORDS: case report, chamomile, contact urticaria, cosmetics, wet wipe

CASE REPORT

An 8-year-old atopic girl was referred to our Contact Eczema Department with an acute facial rash after applying a wet wipe to her face. Her personal history of interest included abdominal pain after ingestion of chamomile tea in two previous episodes. The mother provided a photo showing the itchy erythematous facial rash (Figure 1A) that appeared within minutes of applying the wet wipe (Toallitas Bebe Frescas y Perfumadas con Aloe Vera y Camomila; Deliplus, Mercadona S.A., Spain). The rash disappeared after 30 minutes. Chamomile was found among the ingredients of the wipe. The girl had used the same wipes on a previous occasion with the same skin reaction. Her mother denied applying chamomile tea to the skin previously. No contact with plants by the patient was reported. Specific immunoglobulin E (IgE) was requested for chamomile, artemisia, and ragweed in serum.

Patch tests were performed with the European Comprehensive Baseline Series (Chemotechnique Diagnostics, Vellinge, Sweden), plant series (Chemotechnique Diagnostics), *Aloe vera* plant gel “as is” (home preparation), and chamomile extract 2% pet. (home

preparation). Photopatch was performed with the wet wipe “as is” (2 × 2 cm), *Compositae* mix II 2.5% pet., sesquiterpenic lactones mix 0.1% pet., and chamomile extract 2% pet. A semiopen test was performed with wet wipe “as is,” *A vera* plant gel “as is,” and chamomile extract 2% pet. Results were interpreted according to the criteria of the ICDRG. Patch tests were read on day (D) 2 and D4. The patient showed a positive patch test reaction (erythema and mild oedema in the semioclusion zone) to the wet wipe “as is” at 20 minutes (+/++); Figure 1B). The rest of the investigation showed no positivity. Only the specific IgE for chamomile was 20.8 UI/mL (<0.1 UI/mL). The wet wipe skin prick test showed a positive urticarial reaction after 15 minutes (7 × 5 mm), positive histamine (8 × 8 mm), and negative control with saline (0 × 0 mm). Ten controls subjected to the patch test with wet wipe were all negative.

Contact urticaria caused by wet wipe was diagnosed, and the main culprit suspected was chamomile. Avoidance of cosmetic products and foods/drinks containing chamomile was recommended. The importance of avoiding chamomile was explained to the mother because of the risk of anaphylaxis. Follow-up at 3 months showed no rash or other digestive problems.



FIGURE 1 (A) Localized erythema and oedematous papules on cheeks and chin within minutes of using a wet wipe. (B) Semiopen wet wipe test, with pruritus and erythema (+/+++) after 20 minutes

DISCUSSION

Chamomile tea, common worldwide, is an herbal tea made from dried chamomile flowers and hot water. Chemically, there are several biologically active components obtained from the dried flowers. Sources of contact with chamomile include the digestive route through infusions of its flowers, and modern craft breweries where the plant is used to brew bitter beer with the chamomile plant. Another source of contact is in the cosmetic field, such as perfumes, cosmetics creams, and hair care products (as a lightener).¹ Among the properties attributed to chamomile in traditional medicine are its therapeutic digestive, sedative, vasodilatory, antispasmodic, and toning, among others. Among natural remedies, cold chamomile tea is also used to treat eye conditions, genital mucous diseases, and even leg ulcers.

The main components of chamomile flowers are polyphenolics, including apigenin, quercetin, patuletin, and luteolin. Terpenoids are the main components of the essential oil extracted from chamomile flowers.² Systemic allergic contact dermatitis³ and airborne contact dermatitis,⁴ both caused by chamomile tea, have been reported in the literature. Allergic conjunctivitis or anaphylactic shock are other clinical presentations suggesting sensitization to chamomile. Contact urticaria caused by chamomile has also been reported.⁵ Chamomile is often used in wet wipes as one of the ingredients.⁶ Among the components of German chamomilla flowers (*Chamomilla recutita*), matricin and desacetylmaticarin (both sesquiterpene lactones), and herniarin (7-methoxycoumarin) have also been described as potential allergens.⁷ Other clinical presentation to be considered are the airborne form due to volatilization of the oils after infusion of the flowers for chamomile tea.⁴

ACKNOWLEDGEMENTS

We acknowledge all staff working in the Contact Eczema and Immunoallergic Diseases Department, especially the specialized nurse Victor Alfredo Cassini Gómez de Cádiz.

AUTHOR CONTRIBUTIONS

Ángela Ayén-Rodríguez: Conceptualization (supporting); formal analysis (supporting); investigation (supporting); methodology (supporting); writing – original draft (supporting). **Francisco José Navarro Triviño:**

Conceptualization (lead); data curation (lead); investigation (lead); methodology (lead); writing – original draft (lead); writing – review and editing (lead). **Ricardo Ruiz Villaverde:** Validation (supporting); writing – original draft (supporting); writing – review and editing (supporting).

CONFLICTS OF INTEREST

None to declare.

CONSENT

Written informed consent was obtained from the tutor of the patient for publication of this case report.

ORCID

Francisco J. Navarro-Triviño  <https://orcid.org/0000-0002-5454-3671>

Ricardo Ruiz-Villaverde  <https://orcid.org/0000-0002-0381-6174>

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How to cite this article: Navarro-Triviño FJ,

Ayén-Rodríguez Á, Ruiz-Villaverde R. Contact urticaria caused by chamomile in a wet wipe. *Contact Dermatitis.* 2022;86(6):548-549. doi:10.1111/cod.14067

Allergic contact dermatitis associated with benzophenone sensitization after a recent black ink tattoo

Aikaterini Tsiogka  | Konstantinos Liopyris | Stamatios Gregoriou 

Faculty of Medicine, 1st Department of Dermatology-Venereology, Andreas Sygros Hospital, National and Kapodistrian University of Athens, Athens, Greece

Correspondence

Dr Stamatios Gregoriou, 1st Department of Dermatology-Venereology, Faculty of Medicine, National and Kapodistrian University of Athens, Hospital for Skin Diseases "A. Sygros", 5 I. Dragoumi Street GR-16121 Athens, Greece.

Email: stamgreg@yahoo.gr

KEYWORDS: case report, tattoo, eczema, sunscreen, patch test