Food Contact Urticaria

Yousef M. Al Khair, MD, FRCP
Asad Tonsi, MD, FRCPC

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Nonimmunological Contact Urticaria, Fragrance Mix, Balsam of Peru, Benzoic Acid.

Deleo defines contact urticaria as a transient, wheal and flare response at the site of cutaneous contact to a topically applied material. [1] The reaction usually appears within half an hour and disappears within few hours leaving normal skin. Foods are among the most common agents that produce immediate contact reactions. Here we report a case of contact urticaria to food, with an interesting clinical presentation.

Case Report (Fig.1)

A 35 years old man, working as an electronic technician, who is otherwise healthy, presented with a 4-5 years history of perioral erythema and some times swelling on the lips, involving the lower lip more than the upper, occurring within minutes after eating any type of food, but more often occurs after eating spicy or aromatic foods. With time this condition occurred more commonly; with a persistence of a mild-moderate rim of erythema on the vermilion border. He was seen by other dermatologists who diagnosed him as having contact dermatitis. He was patch tested as well and was reported as negative. On examination there was a well-defined erythematous palpable ridge, running along the vermilion border of the lower lip and mild perioral erythema. The buccal cavity was normal. Histopathology of a vertical elliptical skin biopsy done at the vermilion border of the lower lip revealed mild spongiosis with superficial perivascular lymphocytic infiltrate, possibly consistent with contact dermatitis. The patient was patch-tested the European standard tray, antimicrobials, vehicles and cosmetics. Reading the test after 30-minutes showed an immediate reaction (Erythema, flare) to Fragrance mix, Balsam of Peru, Benzoic acid and Sorbic acid, with no reaction at 96 hours.

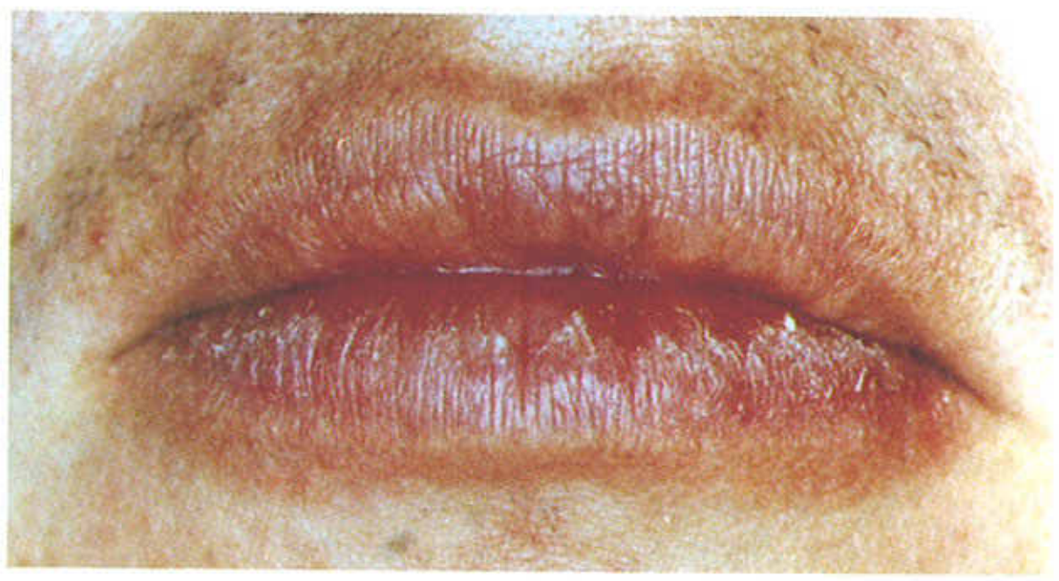

Fig.1 *35-year-old male patient with persistent redness along the vermilion border after eating spicy food.*

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Al Badreyah Medical Tower - Jeddah
Tel. No. 2-6060666 (Off) / 2-6648518 (Off)
Fax.# 2-6060847 / 2-6648427
Mobile: 0549827 - Email: dryousefmd@yahoo.com
Address: Jeddah 21497 - P.O. Box: 31270 - Saudi Arabia.

Discussion:

Contact urticaria is a general term that encompasses a number of different clinical manifestations that ranges from pruritus, stinging, burning, erythema, wheal and flare to anaphylaxis [2]. There are three mechanisms for contact urticaria [3,5,6]:

1- Immunological contact urticaria, caused by an antigen – antibody, type I, IgE-mediated hypersensitivity reactions. These patients need to be previously sensitized to the contactant.
2- Nonimmunological contact urticaria, this reaction is less well understood, yet it is the most common type of contact urticaria and occurs in the majority of individuals exposed to the contactant.
3- Uncertain mechanism mediated contact urticaria, e.g. cases with persulfates

The reaction resembles that of immunological contact urticaria, but no IgE can be demonstrated in the patient serum or in the tissue.

Contact urticaria in response to chemicals is far more common than realized; as important reason for under reporting is the existence of suburticariogenic forms [4]. Kligman reported in his paper that agents that induce wheals at a high concentration would almost always induce only erythema when a nonurticariogenic dilution is applied, and with a further dilution a variable proportion of subjects will have pruritus alone.

Conclusion:

We draw the attention here to the wide spread spectrum of presentation of contact urticaria. Our patient presented with redness involving only the vermilion border without involvement of the oral mucosa or the perioral skin. We believe that the persistence of erythema might be secondary to persistent vasodilatation. Most of the time those cases are missed during our routine patch testing because usually we do not do reading at 30 minutes and we read them only after 96 hours.

Dermatologist should keep a high index of suspicion of the wide spectrum of presentation of contact urticaria.

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