

Contact dermatitis to snuff

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Case Report

A 66-year-old retired man, who used nasal drops with nafazoline and snuff tobacco, has presented itchy, lichenified, and hyperpigmented lesions on the sides of his face and chin since he started using snuff 8 years ago. At that time, he was working outdoors and, therefore, constantly exposed to the sun.

He was patch tested with the Brazilian Standard series, the cosmetic series, completed with mentol 1% in pet., oil of roses 1% in pet., camphor 10% in pet., oil of carmine 1% in pet., eugenol 1% in pet., and his personal products such as snuff in olive oil and the nasal drops. The snuff tobacco he uses is manufactured by craftsmen and does not even have a label. Therefore, it was not possible to find out its components. Readings taken at 48 and 96 hr were negative.

The repeated open application tests were performed with 1 cm² of a mixture of snuff and pet. on the forearm

and on the face, close to the lesions. They were applied twice a day for 7 days, with negative results after 7 and 15 days. The antinuclear antibody titre was negative, and the skin biopsy showed mild alterations such as hyperkeratosis, hypergranulosis, acanthosis, and an inflammatory infiltrate.

He was treated with hydrocortisone ointment and pet., and sun exposure was avoided. He did not give up his habit because he had become addicted but reduced the snuff consumption, with improvement of the lesions and the symptoms.

Comment

Dipping snuff is common among some groups of people especially in Africa and Sweden, but it is rare in Brazil nowadays.

There is only one reference to snuff contact dermatitis in literature (1, 2). Reports on tobacco contact dermatitis are rare, and it has been described mainly as an occupational irritant contact dermatitis (2–4). There are a few references to hypersensitivity to tobacco, and most of them refer to workers in cigarette and cigar factories, less often to tobacco users (2–4). Although there are some references pointing that the precise allergens in cured tobacco have not yet been identified and that nicotine itself is not the sensitizer (2), other authors mentioned allergic contact dermatitis to nicotine in transdermal therapeutic system (5). However, most of the authors agree that tobacco can also act as an irritant, causing mild eczemas. The irritants present in tobacco are fertilizers, pesticides, green or cured tobacco leaf, and among the last ones, probably nicotine and related alkaloids (2, 3).

In 1958, Shanon and Tas reported a 72-year-old man with dermatitis around nostrils and with positive patch-test reaction to his snuff tobacco. However, 6 of 97 control subjects showed the same (1, 2). In 2005, a case of airborne allergic contact dermatitis to cigarette was reported. The patient also presented hyperpigmented lesions on the face (4).

Based on the following points, irritant contact dermatitis to tobacco is commoner than allergic contact dermatitis, the patient showed negative patch-test reactions, the clinical correlation to the snuff use, and the improvement after reduced consumption, it seems that an irritant related

to it could be the cause of the reaction. Another point to be considered is the phototoxic action of cigarette smoke (6). There was no smoke in this case, just a snuff tobacco contact associated with great sun exposure, which suggests that an irritant present in it could also cause phototoxic reaction.

Snuff use is not common nowadays although it might become common because of the passive smoking issue. Therefore, we would like to point out that it may cause irritant and/or phototoxic reactions.

References

1. Shanon J, Tas J. Dermatitis of the nose due to snuff tobacco. *Ann Allergy* 1958; 16: 156.
2. Rycroft R J G. Tobacco dermatitis. *Br J Dermatol* 1980; 103: 225–229.
3. Le Coz C J. Cigarette and cigar makers and tobacco workers. In: *Handbook of Occupational Dermatology*, Kanerva L, Elsner P, Wahlberg J E, Maibach H I (eds): Berlin, Heidelberg, and New York, Springer Verlag, 2000: 887–889.
4. Kato A, Shoji A, Natsuko A. Contact sensitivity to cigarettes. *Contact Dermatitis* 2005; 53:52–53.
5. Bircher A J, Howald H, Ruffli T H. Adverse skin reactions to nicotine in a transdermal therapeutic system. *Contact Dermatitis* 1991; 25: 230–236.
6. Placzek M, KerKmann U, Bell S, Koepke P, Przybilla B. Tobacco smoke is phototoxic. *Br J Dermatol* 2004; 150: 991–993.

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