•

Photocontact dermatitis after gargling with a solution containing benzydamine

Rainer Henschel, Monika Agathos and Reinhard Breit

Department of Dermatology, Hospital Munich-Schwabing, Munich, Germany

Key words: benzydamine hydrochloride; medicaments; non-steroidal anti-inflammatory drugs; photodermatitis; Tantum®.

Benzydamine hydrochloride is a nonsteroidal anti-inflammatory drug, which has now been used in Europe for nearly 3 decades. Case reports of allergic contact dermatits (1–6) following topical application and photocontact dermatitis (6–10) following topical or systemic treatment have been described.

Case Report

For pharyngitis, a 67-year-old woman gargled with Tantum® verde, a solution containing benzydamine hydrochloride 0.15% (15 mL, 3×/d). An erythematous rash on sun-exposed skin developed within the third week of treatment, during a holiday in the Veneto (Italy), worsening within the next few days. There was no history of use of a sunscreen. After oral and topical corticosteroids, skin lesions improved within a few days.

On examination, there were mainly well-demarcated areas of eczema on the face, neck, neckline, forearms and lower legs.

On patch testing (European standard series, fragrances, Tantum ver-

de as is) readings were made at D2, D3 and D4. Apart from a positive reaction (+) to nickel at D4, no other reaction was obtained. On $\begin{array}{lll} photopatch & testing & with & 10\,J/cm\\ UVA & (standard series, Tantum verde \end{array}$ as is, Tantum verde 10% aq.), however, positive reactions to both concentrations of Tantum verde (= benzydamine hydrochloride at 0.15% and 0.015%, respectively) were shown: a + reaction at D1 and D2. and a ++ reaction at D3 in each case (readings performed at D1, D2 and D3 after irradiation). We carried out no additional testing of benzydamine hydrochloride itself, because there are no reported cases of photoallergic reactions produced by any other components of Tantum verde (methyl-4-hydroxybenzoate, glycerol, hydrogen carbonate, polysorbate, saccharin, ethanol, E 104 and E 131).

Comment

Benzydamine is 1-benzyl-3-(3-dimethylaminopropoxy)-1H-indazole, used for medical purposes as the hydrochloride. Benzydamine hydrochloride has analgesic, anti-inflammatory and antipyretic effects. In the past it has been used especially in the symptomatic treatment of oedematous postoperative or traumatic swelling, non-specific inflammation of the upper respiratory tract and inflammation of the connective tissue and joints. Nowadays, Tantum verde is the only such preparation listed in Germany, and this is used for the treatment of oral and pharyngeal inflammation. It can be administered as a spray, a gargle-solution or a rinsing solution.

Photocontact dermatitis has occurred after topical (6–8, 10) and systemic treatment (7, 8). In all such cases, allergy was confirmed by photopatch testing with benzydamine hydrochloride down to 0.01%, using either water or petrolatum as vehicle. As far as we know, there are

only two other case reports of photoallergic dermatitis after local pharyngeal treatment with preparations containing benzydamine (7). This presumably occurs because of oral or intestinal adsorption.

References

- Balato N, Lembo G, Patruno C, Bordone F, Ayala F. Contact dermatitis from benzydamine hydrochloride. Contact Dermatitis 1986: 15: 105.
- Bruynzeel D. Contact allergy to benzydamine. Contact Dermatitis 1986: 14: 313–314.
- Christophersen J. Allergic contact dermatitis to benzydamine. Contact Dermatitis 1987: 16: 106–107.
- Foti C, Vena G A, Angelini G. Occupational contact allergy to benzydamine hydrochloride. Contact Dermatitis 1992: 27: 328–329.
- Goday Buján J J, Ilardia Lorentzen R, Soloeta Arechavala R. Allergic contact dermatitis from benzydamine with probable cross-reaction to indomethacin. *Contact Dermatitis* 1993: 28: 111–112.
- Vincenzi C, Cameli N, Tardio M, Piraccini B M. Contact and photocontact dermatitis due to benzydamine hydrochloride. *Contact Dermatitis* 1990: 23: 125–126.
- Fernandez de Corres L. Photodermatitis from benzydamine. Contact Dermatitis 1980: 6: 285.
- Frosch P J, Weickel R. Photokontaktallergie durch Benzydamin (Tantum). Hautarzt 1989: 40: 771–773.
- Ikemura I. Contact and photocontact dermatitis due to benzydamine hydrochloride. *Jap J Clin Derm* 1971: 25: 129.
- Motley R J, Reynolds A J. Photodermatitis from benzydamine cream. Contact Dermatitis 1988: 19: 66.

Address: Rainer Henscel Department of Dermatology Hospital Munich-Schwabing Koelner Platz 1 80804 Munich Germany