

Allergic urticaria from tonic water

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Key words: double-blind placebo-controlled food challenge; quinine; tonic water; urticaria.

• We evaluated a 50-year-old male who was admitted to the emergency room because of generalized pruritus and urticarial lesions on his abdomen, arms, and face, as well as mild periorbital edema. He had no past medical history of chronic medical conditions. He denied a history of previous episodes of urticaria triggered by heat, cold, pressure, exercise, sunlight, emotional stress, medications, foods or food additives. The patient reported having had a half of a glass of tonic water 30–40 min before the onset of symptoms. In the emergency room, the patient was treated with intramuscular epinephrine injections (0.3 mg), methylprednisolone sodium succinate (60 mg), and dexchlorpheniramine (5 mg). His urticarial lesions disappeared within 8 h.

After obtaining informed consent, we investigated the patient and 10 healthy, non-atopic control subjects. We conducted skin prick tests for the same brand of tonic water at 1:10 dilution and quinine sulfate at 3 mg/ml. The response was evaluated 20 min later. A positive reaction was observed with tonic water (wheal: 4×5 mm in diameter; flare: 8×12 mm) and with quinine sulfate (wheal: 5×5 mm; flare 9×11 mm). The 10 control subjects had no skin test response to tonic water and quinine sulfate. The patient underwent an open oral challenge with increasing doses of the same brand of tonic water. Fifteen minutes after a 60 ml dose (5.4 mg of quinine hydrochloride) the patient developed pruritic wheals on his trunk and

arms. The suspicion of quinine as the causative agent prompted us to perform a double-blind placebo-controlled food challenge with quinine. Increasing doses of quinine sulfate or placebo (dextrose) were administered in opaque capsules at 30-min intervals. The verum and placebo were randomly given on two separate days with an interval of 48 h. The patient reacted with generalized pruritic wheals to a cumulative dose of 9 mg of quinine sulfate.

Quinine-related hypersensitivity manifestations have been reported to include thrombocytopenia and hemolytic uremic syndrome (1), lupus-like syndrome (2), photosensitivity (3), cutaneous vasculitis (4), and anaphylactic shock (5). In our patient, the results of oral challenges established a definite causal relationship between quinine and urticaria.

Furthermore, the positive results of skin testing suggest that urticaria resulted from an IgE-dependent hypersensitivity mechanism. Tonic water is widely consumed worldwide and may be an unrecognized cause of urticaria. The concentration of quinine in commercial beverages should be considered as a potential cause of acute IgE-mediated urticaria and angioedema.

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Accepted for publication 21 June 2001

Allergy 2002; 57:52

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ISSN 0105-4538

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Immediate hypersensitivity due to pseudoephedrine

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Key words: ephedrine; epinephrine; hypersensitivity; pseudoephedrine.

• SYMPATHOMIMETIC agents are used widely but despite this extensive use as vasoconstrictors hypersensitivity reactions from sympathomimetic drugs are rare.

The most frequent adverse reaction is contact dermatitis

caused by

eyedrops,

eardrops, or any

topical preparations (1,2) and the most

common reaction to oral

sympathomimetics is nonpigmenting fixed

exanthema (3).

We present three cases of reactions to

pseudoephedrine with different symptomatology: urticaria and anaphylaxis.

Case 1. A 33-year-old man took a

rinoebastel tablet (pseudoephedrine and

Lower limb paresis due to contact allergy.