

LETTER TO THE EDITOR

AN IgE IMMEDIATE REACTION TO THIOCOLCHICOSIDE

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Hypersensitivity reactions due to muscle relaxant drugs may be related either to a nonspecific release of allergic mediators or to allergic reactions induced by the molecules themselves. Rare cases of hypersensitivity reactions have been associated to thiocolchicoside, and no case of IgE-mediated immediate reaction has actually been reported to date. We report the first documented case of immediate anaphylaxis to thiocolchicoside.

Hypersensitivity reactions due to muscle relaxant drugs may be related either to a nonspecific release of allergic mediators or to allergic reactions induced by the molecules themselves. A proper allergy diagnosis which includes skin tests and, if negative, a provocation test is needed (1). Thiocolchicoside is a sulfureted semi-synthetic molecule derived from colchicoside. It has muscle relaxant activity and is indicated to treat the outcomes of spastic hemiparesis, Parkinson's disease and drug-induced Parkinsonisms, acute and chronic lumbosciatica, cervical neuralgia, persistent torticollis, as well as post-traumatic and post-operative pain syndromes (2). Moreover, thiocolchicoside has recently shown an anticancer activity, being able to inhibit proliferation of leukemia, myeloma, squamous cell carcinoma, breast, colon, and kidney cancer cells (3). When administered orally, peak plasma concentrations of the drug are achieved after 50 minutes and the molecule half-life is 4.5 hours. Known side effects include seizures and other SNC and psychiatric events; rare cases of hypersensitivity

with urticaria, angioedema, generalized itching, erythema, maculopapular eruption, digestive disorders; and, exceptionally, anaphylactic shock and vesiculobullous eruptions.

In the English Literature, there are very few reported cases of hypersensitive reactions to thiocolchicoside. These include a case of Nicolau syndrome (although such a syndrome is currently not considered as a hypersensitivity reaction but published as such), and delayed allergic reactions characterized by contact dermatitis and photosensitivity reactions (4-7). Therefore, to date, there are no published data on documented IgE-mediated allergic hypersensitivity reactions to thiocolchicoside. We describe such a case.

A 29-year old female came to our Clinic referring two different drug hypersensitivity reactions. The first one, occurring 10 years previously, had appeared a few minutes after an injection of ketoprofen and thiocolchicoside. The patient presented an immediate reaction characterized by generalized urticaria. Two years prior to the visit the

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patient had experienced a second reaction, occurring a few minutes after a mesotherapy injection with piroxicam, thiocolchicoside, vitamin B12, vitamin B1, buflomedil hydrochloride, procaine and piribedil. The subject presented a grade 2 anaphylaxis characterized by generalized urticaria associated with palmoplantar pruritus and laryngeal dyspnea. Since the last episode, the patient had not taken any piroxicam, ketoprofene or thiocolchicoside. The patient had suffered from atopic dermatitis during her early childhood and is currently sensitized to house dust mites, with no particular clinical symptoms.

In an effort to evaluate all of the drugs potentially involved in the reaction and no longer employed by the patient, we firstly performed an oral provocation test to piroxicam. The test was negative and therefore the molecule was considered safe for the patient and not responsible for the reported reaction. We then decided to perform skin tests to thiocolchicoside. Skin prick tests were positive at a concentration of 2 mg/ml (papule diameter: 7 mm). A negative control (saline) was negative. The same test, performed on 8 healthy controls, at the same concentration, was negative in all 8 subjects, thus excluding an irritative reaction due to a high concentration of the molecule. A provocation test was not performed, given the severity of the reaction (grade 2 anaphylaxis, 2 reactions upon exposure) and the positivity of the immediate skin tests. The anaphylaxis was therefore considered to be an IgE-mediated allergic reaction. The case we present is the first documented case of immediate

reaction associated with thiocolchicoside.

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