

after the surgical wound was treated with a small quantity of betadine® the patient presented with grade 4 anaphylactic shock with acute respiratory distress syndrome requiring intensive resuscitation for 24 h. Sampling performed immediately after the incident showed the tryptase level to be 39 µg/l and serum histamine level 22.4 nmol/l.

Personal history included a previous surgery for peripheral neurolysis in 2000, during which acute urticaria of the left arm spreading to the neck and face was observed 20 min after swabbing with betadine®.

Skin tests carried out 9 months after the anaphylactic shock on skin reactive to codeine (4 mm) were negative for all curarizing agents. Prick test to betadine® was positive: 5 mm, intradermal test (IDT) was positive at 10^{-4} (10 µg/ml); 7.5 mm (injection papula 3 mm), prick test to povidone; 3 mm, IDT to povidone was positive at 10^{-4} ; 7 mm (injection papula: 2.5 mm).

Total IgE value was 5000 kIU/l. The results of the leukocyte histamine release test could not be interpreted because cellular histamine was lower than normal (280 nmol instead of 600). Also, the iodinated povidone interfered with the histamine assay. The basophil activation test (BAT) was positive to betadine® (14% CD3+, CD63+ and to povidone: 18% for a negative control at 0.5% and a positive anti-IgE control at 23%). The leukotriene release test was positive to betadine® and to povidone: 180 and 140 pg/ml (normal limit ≤ 100 pg/ml). Both tests were negative to atracurium.

The radioimmunoassay (RIA) to quaternary ammonium ions was positive at 4.8% but the inhibition test with atracurium was negative. RIA to penthotal was positive. Serum tryptase values were normal, thus eliminating the acceptable clinical explanation that the severity of the shock may be related to latent mastocytosis.

Anaphylaxis induced by iodinated povidone is anaphylaxis to povidone, the carrier molecule for iodine atoms. Anaphylaxis is documented by positive skin tests, BAT and cysteinyl-leukotriene release test (CAST), (1, 2). Positive RIA to quaternary ammonium ions is of no

value: there is no RIA inhibition with atracurium and the skin tests to curares are negative. Only 89% specificity has been documented (3–5). Similarly, RIA to penthotal may produce false positive results (6).

Povidone was previously used via the IV route as a plasma replacement or as a solubilizing agent for injectables. Doxycycline IV that contained povidone was withdrawn from the Pharmacopoeia because of anaphylactic reactions. Iodinated povidone is a skin antiseptic but the case reported here shows the risk of intra-vascular passage if a little quantity is introduced in a surgical wound. When the patient was questioned later, it was found that he had had a less serious reaction earlier. This is the second case of allergy reported to povidone (7).

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Allergy to local anesthetics of the amide group with tolerance to procaine

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Key words: local anesthetics; drug allergy; ropivacaine; procaine; cross-reactivity.

Local anesthetics (LA) are widely used drugs in dentistry and ambulatory surgery. Adverse reactions to LA are frequently reported but the incidence of hypersensitivity reactions, like IgE-mediated reactions are rare, being probably <1%

Allergy to amide group local anesthetics including ropivacaine.

(1, 2). LA are grouped, depending on their chemical structure, into two categories: benzoate esters and amides; the latter group is usually well tolerated. In some exceptional reports of allergic reactions caused by LA of the amide group, mainly to lidocaine, other amide drugs, such as mepivacaine and ropivacaine, were usually well tolerated (3).

We present a 46-year-old woman, referred to us for evaluation of tolerance to LA before the performance of deep skin biopsies and dental procedures; in

brief, she had anaphylactic reactions after the administration of an unknown local anesthetic agent 20 years ago and after lidocaine administration 12 years ago. Five years ago the patient also reported a large local urticaria after topical use of lidocaine (EMLA® anesthetic disc, AstraZeneca, USA). After obtaining the patient's consent, the diagnostic approach was carried out. Skin tests were performed with commercial LA drugs. Positive skin-prick test results with full-strength drug were obtained for lidocaine (AstraZeneca) with a wheal diameter of 5 × 4 mm, bupivacaine (AstraZeneca) with 6 × 4 mm and mepivacaine (Laboratórios Inibsa, Portugal) with 4 × 3 mm. Skin-prick test for ropivacaine (AstraZeneca) was negative, but the intradermal (ID) test with 1 : 100 dilution was positive (12 × 10 mm). Then, we performed skin tests (prick and ID testing) with procaine (Labesfal, Portugal), the LA belonging to the ester group, which were negative. On the next day, the patient was admitted to an intensive care unit for challenge procedures. The subcutaneous challenge with 1 ml of procaine (2%) was negative, (three biopsies – forearm and thigh), with no adverse reactions. In order to ensure that the positive skin test results were relevant, we carried out placebo controlled (saline), single-blind subcutaneous challenge test with 0.1 ml of ropivacaine (0.2%, preservative-free solution), and it was strongly positive (severe systemic reaction with laryngospasm, treated with parenteric epinephrine), confirming the diagnosis of allergy to LA of the amide group. The immediate hypersensitivity reaction was proved in this case and, as far as we know, this is the first report of severe hypersensitivity to ropivacaine, a drug unique among LA because it is prepared as an isomer (the S-enantiomer of the propyl homologue of bupivacaine) rather than a racemic mixture. The therapeutic alternative was procaine, the ester anesthetic, not routinely used nowadays. In conclusion, although ropivacaine is a first-choice drug for the majority of LA allergic patients, cross-reactivity must be thought within the amide group, in patients with positive skin tests (4); in these cases, allergy evaluation must be accomplished in a reference centre in order to identify safe alternatives (3).

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Comparison of skin prick test and atopy patch test with dust mite extracts in patients with respiratory symptoms or atopic eczema dermatitis syndrome

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Key words: atopy patch test; mite allergy; skin prick test.

The atopy patch test (APT) was introduced to assess sensitization to inhalant allergens in patients with atopic eczema dermatitis syndrome (AEDS), but its diagnostic role in subjects with respiratory allergy has been only scantily investigated. We

Skin prick and atopy patch test in mite allergy.

sought to evaluate the response to mite extracts using APT and to skin prick tests (SPT) in subjects with persistent respiratory symptoms, AEDS, and with both the diseases.

Eighty-nine patients were included in the study, 75 (84.3%) children and 14 (15.7%) adults, 54 (60.7%) males and 35 (39.3%) females. They were divided in to three groups of 47, 15, and 27 subjects, with only respiratory symptoms, only AEDS, or both, respectively. They underwent usual SPTs with mite extracts and APTs by mite extract in Finn chambers, which were removed after 48 h, with readings after 20 min and 24 h.

Of the 89 patients, 24 showed a positive SPT and 69 a positive APT; in 17 both SPT and APT were positive, while 13 were negative to both the tests. The APT was more frequently positive than SPT not only in the two groups with AEDS – 32 of 42 (86.5%) vs eight of 42 (21.6%) – but also in the group with only respiratory symptoms – 37 of 47 (78.7%) vs 16 of 47 (34%).

These results confirm the high value of APT in patients with mite-induced AEDS and suggest that its routine use might improve the diagnosis of respiratory allergy to house dust mites also.

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Contact dermatitis due to a 'de Quervain' splint

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Key words: allergic contact dermatitis; 'de Quervain' splint; orthopaedic splint; polyethylene.

Several components of splints, such as rubber or neoprene, have been implicated