

Allergic contact dermatitis from cobalt in a beauty product

T. A. CHAVE AND A. P. WARIN

Department of Dermatology, Royal Devon & Exeter Hospital (Wonford), Barrack Road, Exeter EX2 5DW, UK

Key words: allergic contact dermatitis; cobalt; iontophoresis; galvanic gels; cosmetics; occupational; beauty therapist. © Munksgaard, 1999.

A 21-year-old beauty therapist presented with severe hand eczema. She was not an atopic but gave a history of nickel dermatitis. Patch testing with the European standard series (Hermal) showed ++ reactions to nickel and cobalt only. Among her numerous products tested, the only ones to react were Galvaderm galvanic gel D (++) and galvanic gel E (++) . Both these products contain cobalt (0.22% solution of cobaltous chloride in

water, with a final concentration in the product of 0.1%). Since avoiding these products, she has been completely free of hand eczema.

Galvaderm is used as a facial massage. It is used with iontophoresis and the cobalt is added to assist with this process. We cannot find any previous reports of cobalt allergy related to this or similar products.

Acute anaphylaxis resulting from routine patch testing with latex

E. J. PARRY AND M. H. BECK

Contact Dermatitis Investigation Unit, Hope Hospital, Salford M6 8HD, UK

Key words: natural rubber latex hypersensitivity; anaphylaxis; patch testing; prevention. © Munksgaard, 1999.

A 26-year-old hairdresser with a history of atopic eczema since infancy was referred for patch testing. Her eczema had deteriorated slowly since childhood, but had markedly worsened in the preceding 4 months for no obvious reason. Control of her eczema had required a course of oral prednisolone, daily dressings as an outpatient and finally a short inpatient admission. Her medical history included asthma and hay fever. Investigation as an inpatient revealed an elevated total serum IgE at 775 U/litre (normal <100 U/litre) and specific IgE (RAST) to house dust mite (grade 6, very high), cat (grade 2, moderate) and dog dander (grade 5, very high).

After discharge, she underwent patch testing to an extended standard series, a hairdressing series, a face series, her medicaments and gloves from work. She wore gloves made from natural rubber latex while working as a hairdresser and did not think these were causing a particular problem. Within 1 h of application of the patch tests, she returned to the unit in distress. She complained of generalized itching, nausea, abdominal pain and difficulty breathing, commencing 30 min after patch test application. On examination, her pulse was 110 regular, blood pressure 105/70, heart sounds were normal and her chest was clear to auscultation. She had generalized erythema and urticaria and was scratching intensely. The patches were immediately removed and revealed a large weal at the site of the latex allergen. She was treated with subcutaneous adrenaline, intravenous hydrocortisone and chlorpheniramine, with resolution of her symptoms within 15 min. After observation for a further 2 h she was discharged home.

Subsequently, on further direct questioning, she admitted to swelling of her mouth after a recent visit to her dentist who wore latex examination gloves, and severe mucosal swelling and itching of the vulva after contact with condoms. Specific IgE (RAST) to latex was positive (grade 2, moderate). Subsequent patch testing omitting latex showed a+ reaction to neomycin at 4 days.

In our unit, it has been routine procedure to patch test patients to latex rubber as part of an extended standard series. We have previously documented a prevalence of hypersensitivity reactions to latex in 1.9% of patients attending for investigation (1). We have until now patch tested over 5000 consecutive patients to latex without incident. In addition, patients with suspected immediate hypersensitivity reactions to latex undergo RAST and if necessary subsequent prick testing and remain under observation in the department for 30 min.

This is the 1st episode of anaphylaxis occurring in our population. With hindsight, although not suspected by the medical staff during her admission or at the patch test assessment, this patient shares characteristics of those suspected of being at higher risk of latex allergy: namely female, atopic, and occupational exposure to latex gloves (2–4). Further direct questioning at this stage would have revealed specific events suggestive of latex hypersensitivity.

Like others (5–6), we have patch tested to latex those patients with both negative and positive prick tests, unless there was a history of anaphylactic reactions to latex or severe urticaria after prick testing. We have now

changed our routine practice in order to prevent similar occurrences. Any patient with a history suspicious of latex allergy or reaction to rubber articles, or who is identified as being at high risk, is questioned closely at the assessment visit for possible latex hypersensitivity reactions. All such patients then have blood taken for specific Ig E to latex. If negative, these patients undergo prick testing with latex rubber, prior to application of the patch tests. If a patient demonstrates specific IgE or a positive prick test to latex, this is now taken as sufficient evidence of latex hypersensitivity and patch tests to latex are not applied. If the patient is negative on serum and prick testing, the latex patch test is applied and the patient observed within the department for 30 min.

The place of routine patch testing with latex has recently been questioned (6). We must concur that patch testing should not now be routinely undertaken in those with immediate latex hypersensitivity, and also agree that in common with a number of other allergens, ammoniated latex will occasionally give weakly positive questionable irritant reactions. However, we also presently find in the region of 1.6% of patients tested, showing + or ++ reactions interpreted as allergic. If those with contact urticaria are eliminated from the analysis, the number falls to about 1% of those tested. Importantly, in the vast majority of individuals (85%), the finding is of present relevance and, in consequence, we feel

latex is an appropriate standard allergen for our particular catchment at this time. However, this report does highlight that the risk of an anaphylactic reaction while patch testing to latex is not just theoretical, and departments which carry it out should have available full resuscitation facilities and trained personnel on hand to deal with any emergency situation. Although the risk of such a reaction is small, with a prevalence of 1 in over 5000 patients tested, we have nonetheless changed our routine procedures to reduce this further.

References

1. Wilkinson S M, Beck M H. Allergic contact dermatitis from latex rubber. *Br J Dermatol* 1996; 134: 910–914.
2. Hamann C P. Natural rubber latex protein sensitivity in review. *Am J Contact Dermatitis* 1993; 4: 4–21.
3. Van der Walle H B, Brunsveld V M. Latex allergy among hairdressers. *Contact Dermatitis* 1995; 32: 177–178.
4. Taylor J S, Praditsuwan P. Latex allergy. Review of 44 cases including outcome and frequent association with allergic hand eczema. *Arch Dermatol* 1996; 132: 265–271.
5. Wyss M, Elsner P, Wuthrich B, Burg G. Allergic contact dermatitis form natural latex without contact urticaria. *Contact Dermatitis* 1993; 28: 154–156.
6. Wakelin S H, Jenkins R E, Rycroft R J G, McFadden J P, White I R. Patch testing with natural rubber latex. *Contact Dermatitis* 1999; 40: 89–93.

An unusual case of allergic contact dermatitis from corticosteroids

C. MARCOS, F. ALLEGUE¹, I. LUNA AND R. GONZÁLEZ

S. Alergología, Complejo Hospitalario Xeral-Cies, C/Pizarro 22, 36204 Vigo (Pontevedra), Spain

¹S. Dermatología, Hospital Meixoeiro, Vigo, Spain

Key words: corticosteroids; allergic contact dermatitis; intradermal test; patch test; medicaments. © Munksgaard, 1999.

Case Report

A 74-year-old doctor, with chronic eczema of the external auditory meatus for the last 6 months, was referred because of worsening 24 h after applying clobetasol (Decloban[®]), together with spread to the thorax and axilla. 12 years ago, he had noticed exacerbation of a cutaneous lesion after the application of a topical corticosteroid that he could not remember. He had also had a generalized erythema some hours after an intra-articular injection of paramethasone (Cortidene[®] depot). He had a previous history of recurrent episodes of eczema in the axillae, flexural folds of the arm and the inguinal folds.

Patch testing with the GEIDC standard series (Marti Tor, Spain) was negative, including tixocortol pivalate and parabens. He was also patch tested with a series of corticosteroids shown in Table 1. Tests were positive to all the corticosteroids except flupametasone, fluocortine and tixocortol. False-negatives were obtained with

hydrocortisone and prednisolone, as was proven by intradermal tests with parenteral corticosteroids: hydrocortisone phosphate 100 mg/ml, methylprednisolone 20 mg/ml, dexamethasone phosphate 4 mg/ml, betamethasone phosphate 6 mg/ml and paramethasone acetate 2 mg/ml. These tests were read at 30 min, D1 and D2, and induration with erythema of at least 5 mm in diameter considered as positive. The same tests were performed in 5 control patients. All 5 corticosteroids tested were positive in the patient and negative in the controls.

Patch testing with the excipient propylene glycol 2% was + at D3 and D4, stearyl alcohol 30% and petrolatum (negative control) being negative. The patient was not atopic as he had negative prick tests to a series of inhalants and food allergens and total IgE was 95 kU/l. Repeated episodes of severe otitis due to eczema and pseudomonas and candida infections were difficult to treat, so we started cyclosporin A (Sandimmun[®] neo-ral) 3 mg/kg/day with good control.