

Allergic contact dermatitis from sodium metabisulfite in Trimovate® cream

S. C. TUCKER, J. A. YELL AND M. H. BECK

Section of Dermatology, University of Manchester, Hope Hospital, Salford M6 8HD, UK

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Case Reports

Case no. 1

A 47-year-old man presented with an 8-month history of perianal discomfort, not controlled by either clotrimazole or hydrocortisone 1% cream. Examination revealed perianal eczema, and aqueous cream as a soap and moisturizer and Trimovate® cream were recommended. Whilst awaiting his patch tests, he noticed that the Trimovate® cream worsened his perianal eczema.

He was patch tested to our standard series, a perianal series and his own medicaments. Positive reactions were seen (at D2 and D4) to sodium metabisulfite (++) and Trimovate® cream (++), which contains sodium metabisulfite.

Case no. 2

A 26-year-old male renal transplant recipient had for 2 years been troubled by recurrent bilateral otitis externa. Frequent visits to the ENT department and several treatments with thorough aural toilet and topical and systemic antibiotics, with and without combination potent topical steroid therapy (Trimovate® cream and Fucibet® cream), had not brought about any lasting improvement.

He was patch tested to our standard and ear series and to his own medicaments. Positive reactions were seen (at D2 and D4) to strike-anywhere match (++), sodium metabisulfite (+) and Trimovate® cream (+).

The patient then admitted that he had for the past 2 years been regularly 'cleaning' his ears with strike-anywhere matches. He was asked to give this up and no longer to use Trimovate® cream. At review 4 weeks later, both external ears were much improved and he was symptom-free.

Comment

Sodium metabisulfite (MBS) is a potent reducing agent commonly used as an antioxidant preservative in foods and drugs (1). Oral challenge with MBS can exacerbate skin, intestinal, and respiratory symptoms in children with severe atopic dermatitis, when compared with placebo (2). Intolerance to MBS contained in a pharmaceutical product has been described from a local dental anaesthetic, Neo-lidocaton® (Pharmaton SA, Belgium) (3), a 40-year-old woman, developing severe oedema of the face and neck 2 h after its injection. The reaction persisted for 2 days and was attributed to MBS in the anaesthetic, since both MBS and the product gave positive patch tests.

In contrast, we are not aware of any reports of true allergic contact dermatitis from MBS in topical corticosteroids. We presume that MBS must also be present in a variety of other topical medicaments, but at present no such list is readily available.

Otitis externa due to allergy to strike-anywhere matches has previously been reported, though not for some years (4, 5). It may still be more common than is appreciated.

References

1. Cronin E. *Contact dermatitis*. Edinburgh: Churchill Livingstone, 1980: 706.
2. Van-Bever H P, Docx M, Stevens W J. Food and food additives in severe atopic dermatitis. *Allergy* 1989; 44: 588–594.
3. Doooms-Goossens A, De Alam A G, Degreef H, Kochuyt A. Local anaesthetic intolerance to metabisulfite. *Contact Dermatitis* 1989; 20: 124–126.
4. Ive F A. Studies in contact dermatitis. *Trans St Johns Hosp Dermatol Soc* 1967; 53: 135–140.
5. McKelvie M, McKelvie P. Some aetiological factors in otitis externa. *Br J Dermatol* 1966; 78: 227.