

Letter to the Editor

Sodium metabisulfite – a contact allergen?

Dear Sir,

We were confused by a recent article by Aalto-Korte et al. published in *Contact Dermatitis* (1). The authors describe a patient who after 10 years of working as a hairdresser started to develop oedema, erythema, and itching of the eyelids associated with exposure to hair dyes and settling whenever she was on sick leave. The only possible allergic cause identified was from the hair dyes she was working with. Further investigation with the components of these hair dyes showed strong positive patch tests only to sodium metabisulfite in serial dilutions down to 0.02% and subsequently down to 0.01% (as shown in figure 3 of their article). The reasons given for interpreting the reactions as irritant were first the morphology of the reactions and second the results from the controls. We entirely agree with the authors' statement that it is frequently impossible to distinguish morphologically irritant from allergic reactions. We found it very difficult to interpret the photographic features shown in their article but agree that there may be some erosive changes on the higher concentration patch tests raising suspicion of irritancy, but strong reactions could be seen on figure 3 of their article down to 0.01% for both sodium metabisulfite and potassium metabisulfite. None of the controls reacted to 0.01%, and only one control had slight erythema at 0.02% concentration. The authors have quite correctly tested their patient and controls with serial dilutions and shown gradually diminishing strengths of patch test reaction – a pattern of allergy rather than irritancy. These findings taken in combination with the clinical presentation, we believe

point more to a diagnosis of contact allergy rather than irritancy.

We have no experience of testing these compounds in water (we have tested in petrolatum) but wonder if this diluent increases liability to false-positive reactions.

There is no question that the relevance of many positive patch tests to sodium metabisulfite is enigmatic, and this may be explained by false-positive reactions; however, at this time, we believe that some patients could have genuine allergy. We nevertheless agree with them that further work including serial testing down to low concentrations in different vehicles needs to be done to clarify the anomalous features identified here and in the past (2).

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References

1. Aalto-Korte K, Suuronen K, Alanko K. Sodium metabisulfite – a contact allergen? *Contact Dermatitis* 2009; 60: 115–117.
2. Madan V, Walker S L, Beck M H. Sodium metabisulfite allergy is common but is it relevant? *Contact Dermatitis* 2007; 57: 173–176.