



The slimicide products are commonly delivered with the active component in a concentration of 5-80 %. Wetting agents or solvents are often added to the product before it is added to the pulp. Such solvents are ethylenediamine, dimethylformamide, 1,1,1-trichloroethane, *iso*-propanol and ethylene glycol. When the slimicides are added continuously, the concentration is 1-30 ppm in the pulp. So-called shock charging may occur 1-3 times a day and the concentration may then temporarily rise to 250 ppm.

Except for some of the slimicides, the following preservatives are registered: formalde-

hyde, halogenated carbanilides, benzo-oxazolon-derivatives, 8-hydroxy-quinoline-Cu or -Zn sulfate, 2-hydroxy-diphenyl-sodium, sodium-pentachlorophenolate, modified Ba-metaborate.

From clinical experience we know that antimicrobial agents often are potent sensitizers and several of the above-mentioned are well-known sensitizers. Other agents, however, are not examined regarding their ability to sensitize.

References

- Düring, L., Björndal, H. & Landner, L. (1976) Tillsatskemikalier inom pappers- och cellulosaindustrien. B 280. IVL, Box 21060, S-100 31 Stockholm.
- Landner, L., Björndal, H. & Düring, L. (1976) Slembekämpningsmedel (Slimicides) inom svensk pappersindustri. B 281. IVL, Stockholm.

Immediate reactions to balsam of Peru, cassia oil and ethyl vanillin

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A woman aged 46 has been working for 21 years in a factory producing a popular milk toffee. Every half hour she carries the toffee mass, holding it between her bare forearms and a rubber apron. The mass contains ethyl vanillin as a flavouring agent. For the past 3 years she has suffered from a dermatitis on both forearms, exclusively on the flexor aspects. She was treated with various ointments without benefit. During her vacation there was improvement but the disease did not clear up completely.

The workers in the factory are forbidden to use any perfumes before work. On Sundays the patient seldom used perfume. She noticed, however, that the use of a popular Polish eau-de-Cologne caused itching and redness lasting for about half an hour. She never noted any exacerbation of dermatitis after work in the kitchen preparing vegetables and fruit. Neither did she observe any sensitization to rubber.

The brassières which she uses have some rubber in them.

A patch test with balsam of Peru gave a strong reaction (5 cm in diameter) after 20 min. The patch was removed. After several days, the patient was hospitalized and tested with the standard series, 36 essential oils and vanillin. After 48 and 96 h she was positive only to mercaptobenzothiazole and negative to all the remaining contactants. Immediate reactions, starting after 20 min and receding after 3 h, were observed at the site of balsam of Peru, and somewhat weaker ones at the site of cassia oil. The patient felt some itching but with no systemic symptoms. After 5 days, patch tests with 1 and 2 % ethyl vanillin were applied. In both cases immediate reactions occurred (2 cm in diameter) but delayed reactions were negative.

The case described resembles the immediate reactions to balsam of Peru described by Friis

& Hjorth (1973). It should be stressed that contact sensitivity to balsam of Peru usually coexists with sensitivity to cassia oil (Rudzki et al. 1976). The relevance in this patient between the immediate reaction to ethyl vanillin and the skin changes on the forearms is not clear since contact sensitivity to rubber would be sufficient to explain the occurrence of dermatitis.

References

- Friis, B. & Hjorth, N. (1973) Immediate reactions to patch tests with balsam of Peru. *Contact Dermatitis Newsletter* 13, 389.
Rudzki, E., Grzywa, Z. & Brud, W. S. (1976) Sensitivity to 35 essential oils. *Contact Dermatitis* 2,

Latent metal hypersensitivity among patients with pompholyx

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Christensen & Möller (1975) have described vesiculation in nine of 12 nickel-allergic patients with eczema of pompholyx morphology following ingestion of nickel sulfate. These patients suffered no aggravation of the eczema in spite of prolonged external contact with coins containing nickel.

The current investigation was based on the assumption that pompholyx could be aggravated by ingestion of various metals, even though patch tests with these substances had been negative.

Participants in the study were 13 patients with eczema of dyshidrotic (pompholyx) morphology (bilateral vesicular eczema of the palms, the palmar aspects or the sides of the fingers and/or the soles of the feet). All patients were patch-tested with the standard series of the Finsen Institute, including 3.5 % nickel sulfate, 0.5 % potassium dichromate and 1 % cobalt sulfate. One patient had a positive reaction to rubber; this was not, however, considered relevant to the maintenance of his dermatitis. The remainder of the tests were negative for all the patients.

Following a clinical examination with close-up photographs of the eczema, each patient was given orally a combination of 7.1 mg potassium dichromate (2.5 mg Cr), 11.2 mg nickel sulfate (2.5 mg Ni) and 4.75 mg cobalt sulfate (1 mg Co).

The clinical evaluation was repeated 2 days later and new photographs were taken. If aggravation of the eczema had occurred (increased itching and a greater number of vesicles or vesiculation in areas not previously involved), the metals were given orally one at a time, and the results were again evaluated in the above manner.

The eczema of four of the 13 patients was aggravated following the initial administration of the three metals. Each metal was then given separately. Nickel sulfate caused aggravation in two patients, cobalt sulfate in two patients, whereas no aggravation was seen following chromate ingestion.

On the basis of these results it appears that for some patients one of the factors responsible for the maintenance of pompholyx is ingestion of metals. We are therefore conducting a controlled clinical trial to determine the significance of ingestion of these metals in the maintenance of dermatitis of dyshidrotic (pompholyx) morphology.

References

- Christensen, O. B. & Möller, H. (1975) External and internal exposure to the antigen in the hand eczema of nickel allergy. *Contact Dermatitis* 1, 136-141.

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