

Sensitization to solcoseryl and methylanisate (fragrance ingredient)

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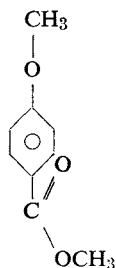
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Mr. E. M. (762165) is a 34-year-old metal grinder who had posttraumatic thrombosis in 1971, developed lower leg ulcers in 1974 and later a weeping stasis dermatitis. Such patients are now routinely patch tested in our clinic (Maltén et al. 1973).

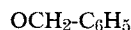
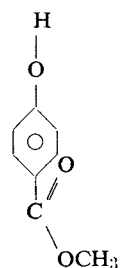
The patient reacted to:

1. Neomycin (20 % pet.), Soframycin (20 % pet.)
2. Iodine tincture (1 % alc.)
3. p. Chloro m. cresol (2 % pet.)
4. Methyl, ethyl, propyl, butyl and benzyl p. hydroxy benzoic acid ester (parabens) (5 % of each pet.)
5. Ultralan cream (as is)
6. Solcoseryl gel (as is)
7. Solcoseryl ointment (as is)
8. Methyl- and ethyl anisate (each 4 % pet.) which are fragrance ingredients.

He denied using perfumes, although perfumes may have been present in some cosmetics or therapeutics used by him. It is, however, likely that the reaction to the perfume ingredients should be regarded as group specific reactions in a patient contact sensitized to parabens (and other ingredients) present in topically applied medicaments, because of the chemical relationships shown in the formulae.



methyl }
ethyl } anisate



parabens

Reference

- Maltén, K. E., Kuiper, J. P., v. d. Staak, W. B. J. M. (1973) Contact allergic investigations in 100 patients with ulcer cruris. *Dermatologica* 147, 241-254.

Dermatitis in engineers due to synthetic coolants

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In the engineering industry, workers employed on the production of metal components usually are at risk from contact with lubricants or cooling emulsions. The well-known manifestations of such contact are oil acne and contact dermatitis.

Allergic sensitization is not common, the most frequent sources being metals and certain additives (e.g. anti-oxidants, anti-bacterial agents) including aromatic amines, mercapto-

benzothiazole and phenolic compounds.

We have studied workers over a 4-year period at a car engine factory producing pistons and other components. The total work population was about 2000.

In 1972 we were first consulted in connection with a high incidence of oil acne attributed to sulphonated or chlorinated mineral oils. After investigation of the working conditions and the usual preventive measures, a

change of oils used was made. In some sections the oils were replaced with synthetic coolants. The incidence of acne fell to almost nil, while that of contact dermatitis of the hands and forearms increased.

In one section employing 74 turners we diagnosed 52 cases of contact dermatitis. They were all patch tested by the ICDRG technique, using the European Standard series of allergens, as well as various constituents of the synthetic coolants provided by the factory; the latter included the following chemicals: triethanolamine, other mono- and poly- amines, morpholine, cyclohexanol, hexylene glycol, ethylene glycol monobutyl ether, polyethylene glycol 400 monolaurate, ditertiary dodecylpolysulphur, benzotriazole, sodium sulphonate of alkylbenzoyle, p-tert-benzoic butyl acid, emulgator t 17, cecanoic acid, and potassium sulphonate of alkylbenzoyle. The concentrations used for patch testing were from 0.1 to 1 % and for triethanolamine 2.5 % pet.

Of all the workers tested, and in some cases retested, nine showed positive reactions (see Table 1). Positive patch test results to metals were to be expected. The positive reactions to triethanolamine were considered to be relevant because it is contained in synthetic coolants. Sensitivities to paraphenylenediamine could be considered relevant since it is present in rubber gloves; those to ethylenediamine could be related to it as a contaminant or to a cross-reaction within the group of polyamines.

Contact allergy to certain polyamines, such as mono-, di- and triethanolamine, implies cross-reactions with ethylenediamine, tri- and

Table 1. Positive patch tests in nine workers

Case	Substance
1	Triethanolamine Cobalt chloride
2	Triethanolamine
3	Triethanolamine
4	Potassium dichromate Cobalt chloride
5	Paraphenylenediamine Benzocaine
6	Paraphenylenediamine
7	Formaldehyde Ethylenediamine
8	Ethylenediamine
9	Formaldehyde

tetraethylenediamine, aminoethylethanolamine, hydroxyzine and piperazine (Calnan 1975, Fisher 1976).

Positive reactions to formaldehyde could not be explained on the basis of the chemical composition of synthetic coolants as specified by the factory technicians. Further inquiry at the factory showed that formaldehyde was added to recovery fluids as an anti-bacterial agent.

References

- Calnan, C. D. (1975) Occupational piperazine dermatitis. *Contact Dermatitis* 1, 126.
Fisher, A. A. (1976) Cross-reactions between epoxy resin, amine hardeners and ethylenediamine. *Cutis* 17, 839-841.

Wood tar patch test

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As four members of the Spanish Contact Dermatitis Investigative Group, we have jointly tested 707 patients in Barcelona, Seville and Salamanca with the Al-test® and allergens from Trolab. The results of tests with wood tars (9 % pet.) are shown in the table below.

In 10.3 % of cases the wood tars gave an irritant response, with mild erythema and oedema at 48 h which had disappeared at 96 h. Clinical correlation was absent. In only 1.8 % were the reactions considered allergic.

In Barcelona the proportion of allergic and irritant cases was much higher than in Seville and Salamanca.

	Tested	Allergic	Irritant
Total	707	13 (1.8%)	73 (10.3%)
Barcelona	386	12 (3 %)	66 (17 %)