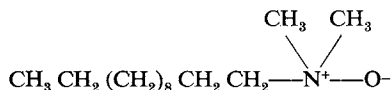


open test in the five volunteers who exhibited irritant responses was without effect.

Ammonyx is the trademark of a series of amine oxides. As a group they are surface active agents and are used in dishwashing compounds, shampoos, electroplating baths, paints and fuel additives. Ammonyx LO is lauryl dimethyl amine oxide:



It is used mainly in liquid dishwashing detergents, hair shampoos and foam baths for its foam boosting and stabilizing properties.

Occasional examples of primary irritant dermatitis occur following the use of Hibiscrub, which on testing are usually due to the Ammonyx component. The manufacturer is not aware of any allergic contact dermatitis due to Hibiscrub. We have not previously encountered, or heard of, a similar case in the North Staffordshire Health District, where 96 litres of Hibiscrub are used each month.

Contact eczema from methyl salicylate reproduced by oral aspirin (acetyl salicylic acid)

COLIN HINDSON

Dermatology Department, Royal Infirmary, Sunderland, England

A 63-year-old Iraqi businessman was being treated with paracetamol 250 mg thrice daily for pain due to osteoarthritis of the cervical spine and was referred when he developed an acute dermatitis of the neck, upper back, shoulders and dorsa of the hands.

The patient had been applying an analgesic ointment to his neck and back for 6 weeks in addition to prescribed therapy. The ointment contained menthol, camphor and 12 % methyl salicylate but no antihistamines or local anaesthetics. Patch testing to the constituents of the ointment (2 % in olive oil as recommended by Fisher (1973)) gave a positive reaction to methyl salicylate at 48 h, still present at 72 h, and negative reactions to the other ingredients.

He was advised to avoid all proprietary applications and the rash subsided with topical steroid therapy while he continued to take paracetamol as before.

He returned to Germany and Iraq and 3 months later returned to the UK with a reappearance of his eczema at the previous sites, although he denied using any topical applications except a steroid cream for a few days prior to appointment. It transpired that he had subsequently received treatment from physicians in Germany and Iraq because of his neck pain and had ceased paracetamol therapy. It was not possible to identify his Iraqi and German tablets completely but analysis showed that both of them contained aspirin (acetyl salicylic acid).

A non-aspirin containing analgesic was sub-

stituted and further patch testing carried out with results as follows:

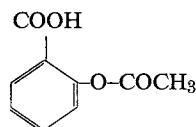
	48 h
Aspirin aqueous 0.3 %	-ve
Aspirin suspension aqueous 5 %	-ve
Sodium salicylate 2 % aqueous	++ve
Methyl salicylate 2 % in arachis oil	++ve

Negative results to the above were found in three control patients.

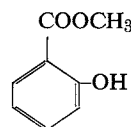
Five days later with his consent he was given 500 mg of aspirin and noticed pruritus and erythema again in the previously affected areas.

Discussion

It is presumed that the patient had a primary allergy to salicylate induced by methyl salicylate and exacerbated by systemic administration of acetyl salicylic acid.



Aspirin



Methyl salicylate

The negative patch tests to aspirin may be valid; on the other hand it is relatively insoluble in water (1:300). Other substances in which it is soluble such as alcohol and chloroform are too volatile for patch test use.

However, aspirin is rapidly de-acetylated in

the body to salicylate and excreted in the urine as the glucuronide and salicylate.

Methyl salicylate is rapidly absorbed through the skin and presumably rapidly demethylated. Free salicylate was detected by spectrophotometry of urine from a volunteer who had 10 g of methyl salicylate in 10 ml of arachis oil applied to normal skin 4 hours earlier (Wailing 1977).

The positive reaction to sodium salicylate would appear to confirm allergy to the salicylate radical. Methyl salicylate is widely used in analgesic creams and linaments commercially available without prescription in the United Kingdom. One of the best known is Linament of Methyl Salicylate (B.P.C.) which contains 25 % in arachis oil. These preparations act as rubefacients and are popular with the general public for relief of aches and

pains. Surprisingly few reports of true allergy to it exist although Morgan (1968) mentions two cases.

The author has seen several cases of irritant dermatitis in young athletes applying it prior to vigorous exercise. It is interesting therefore that Fisher (1973) denotes it as a potent sensitizer.

The case described illustrates the problems of cross sensitization and possible hazards of multiple medical consultation.

References

- Fisher, A. A. (1973) *Contact Dermatitis*. 2nd edition. Philadelphia: Lea & Febiger.
Morgan, J. K. (1968) *British Journal of Clinical Practice* 22, 261.
Wailing, D. (1977) Personal communication.

Allergic reactions to apomorphine

INGER DAHLQUIST

Section of Occupational Dermatology, University Hospital,
S-221 85 Lund, Sweden

Ever since the 1930s it has been believed that apomorphine has a beneficial effect on alcoholism, not merely because it induces vomiting and thereby avoidance reaction, but also that the drug, given in small doses, decreases the craving for alcohol during abstinence. At some clinics in Sweden and Denmark alcoholism has been treated with apomorphine in gelatine capsules during the last 4 years.

This paper reports allergy to apomorphine in two persons working at a pharmacy where the gelatine capsules were filled manually with apomorphine powder.

Case 1

A 32-year-old female dispenser who had occasionally made apomorphine capsules during the previous half year developed severe rhinitis several hours after having filled 500 capsules. The patient also developed eczema on her face and hands. She could, however, continue her ordinary pharmaceutical work without symptoms of allergy as long as she avoided contact with apomorphine. An epicutaneous test showed positive reactions to 1 %, 0.1 % and 0.01 % aqueous solutions of apomorphine, but was negative to 0.001 %.

Case 2

A 52-year-old woman had on four occasions within 1 year cleaned the utensils used for preparing the apomorphine capsules. She acquired a contact dermatitis of her face and hands, pruritus and watering of the eyes. She was granted 2 weeks' sick leave, during which the symptoms disappeared. But 2 days after her return to work the symptoms recurred, this time with respiratory distress requiring systemic treatment with steroids. When the patient had recovered, patch testing gave positive reactions to apomorphine down to 0.001 % in aqua. Patch tests with the chemically related morphine chloride (1 % in aqua) were negative in both women. As both the patients reacted respectively with rhinitis and respiratory symptoms, open tests with apomorphine (1 % in aqua) were performed also on normal skin of the forearms. Neither of the women showed any immediate reaction. Prick tests with the same concentration were negative. The open tests produced no late reactions, but prick tests caused eczematous reactions in both patients. Thin-layer chromatography indicated that the apomorphine used for testing was pure.