to cause an increase in skin blood flow. 1 min exposure to dimethyl-sulfoxide or trichloroethylene is sufficient to influence skin blood flow, and exposure times of 3 min give visible reactions (2). In comparison, only 2 of the diesel oils caused a slight increase in skin blood flow: at 15 min of exposure. Common solvents are thus more potent irritants than the diesel oils studied (1). There are only a few reports (5–7) on the skin irritant properties of diesel fluids, and the present study confirms the classification of these as mild irritants.

Dyed diesel oils are used in other European countries, apparently without skin complaints. The Swedish 'epidemic' is hard to explain. Some mass media exaggerated the severity of symptoms, and the taxation question probably contributed. However, this 'epidemic' is not as widespread as the recent VDU scare (8).

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Allergic contact dermatitis from erythromycin

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Key words: erythromycin; topical antibiotics; allergic contact dermatitis; medicaments.

Case Report

A 21-year-old female, with no family or personal history of atopy, developed pruriginous, erythematous papules and vesicles on her face, 8 days after treatment of acne excoriée with a topical preparation containing erythromycin base (Akne-Mycin™). She had previously used multiple topicals with erythromycin without adverse effects.

Patch tests with the GPEDC standard series and additional series of antibiotics, preservatives and cosmetics, showed positive reactions to perfume mix 8% pet. (++) and erythromycin base 2% pet. (++). Among the other constituents of Akne-Mycin™, kindly supplied by the manufacturer, there were positive reactions to the perfume (Gardenia perfume oil) 5% and 10% eth. (++). Patch tests with erythromycin ethylsuccinate in ethanol were positive at 2%, 5% and 10%, with the strongest reaction at the lowest concentraton (++); no reaction was observed when this salt of erythromycin was tested in pet.

Discussion

Erythromycin is considered a weak sensitizer (1, 2), explained by its structural formula and high MW (3). Only sporadic immediate and delayed-type hypersensitivity have been reported to erythromycin sulphate and stearate (4, 5). Erythromycin base is considered safe topically, even when applied to stasis ulcers (6). Redondo et al. (7) reported a patient with contact dermatitis from erythromycin base, who, after intolerance to topical erythromycin base, also developed systemic contact dermatitis from oral erythromycin ethylsuccinate, both prescribed for erythrasma. The immunosuppressive properties of erythromycin (8) might be responsible for the weaker reaction when its salt (ethylsuccinate) was tested at higher concentration.

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