LETTER TO THE EDITOR

Dinitrochlorobenzene (DNCB) and verrucae vulgaris

Madam,

Verrucae pose one of the commonest problems seen by dermatologists. Majority heal spontaneously, some are treated successfully with one or more of the large varieties of treatments commonly in use and some others are quite recalcitrant. Induced allergic inflammation was employed in the treatment of skin tumours in early 1960. Greenberg et al[1] and Lewis[2] for the first time used this method for the treatment of common warts. McGee[3] used cowpox vaccine with the same aim in 1960. Dinitrochlorobenzene (DNCB) was later used and was demonstrated to be of practical value. Regression of the warts by DNCB is thought to be immune mediated[4] as altered immunological status in patients suffering from warts has been documented[5],[6]. Published studies have reported a high cure rate following DNCB treatment,[7-9].

We report here our experience of treating warts with DNCB:

Thirty six adult patients of both sexes aged between 12 to 46 years, suffering from verrucae vulgaris were the subjects of the study. The duration of lesions varied from three months to eight years. Majority of the patients had warts on hands and feet (few had on other areas except palms and soles). Number of verrucae varied from one to twelve. Most of the patients reported failure of previous treatments, local and systemic, including curettage. However, sixteen patients had no treatment in the past. None of the patients had evidence of associated systemic disease or had taken immuno-suppressive drugs in the near or distant past.

The patients were sensitized with DNCB by the method of Catalone et al (1972)[10], using concentration of 50 ug/ml and 2000 ug/ml. Two weeks after the initial sensitization with DNCB, the patients were taken up for the study. Four to five warts were painted at a time with DNCB in a concentration of 50 ug/ml in acetone. The application was made three times weekly for four weeks. No other treatment was done.

Six patients dropped out of the study and eight could not be sensitized. Twenty-two patients thus completed the study. The lesions disappeared at the end of therapy without scarring, in thirteen out of twenty-two patients (59%). Eight patients had single and five had multiple warts. In three patients with single warts, two weeks of treatment was sufficient. Partial disappearance occurred in four (20.5%) whereas in four others (20.5%) there was no response. Some distant lesions not treated had also disappeared. Nearly all warts showed areas of perilesional erythema or vesiculation. These were associated with mild to

moderate itching. Two patients developed acute 'id' like eruption all over the body at the peak period of inflammatory response and were treated with a short course of systemic steroids. A localised contact-dermatitis-like reaction with pruritus, burning and vesiculation developed in four patients and was treated with topical steroids.

All the lesions healed with macular hyperpigmentation.

In the present study approximately 60% of warts could be cured with DNCB application. No recurrences have been reported during one year of follow up.

There was no correlation between the response to therapy and number or duration of warts. The resolution has been reported after periods varying from 3 to 15 weeks with a range of 2 - 42 weeks. Our results are less favourable than those of some previous workers[7-9].

The disadvantage of induction of contact allergy by DNCB has to be considered in the light of the advantages of this being a painless treatment which achieved healing without scarring.[11] There is a possibility of serious side effects following DNCB sensitization and cross reactivity with chemically related substances like nitrobenzene compounds and chloramphenicol.

DNCB is also used as an algicide in certain air conditioners.

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