

treatment to the appearance of the jaundice conforms with other cases of drug-induced jaundice.

- <sup>1</sup> Kalamanis, Ph, *et al*, *Journal of Clinical Therapeutics*, 1978, 1, suppl A, p 4677.
- <sup>2</sup> Kelsey, W M, and Scharyj, M, *Journal of the American Medical Association*, 1967, 199, 586.
- <sup>3</sup> Tempero, K F, Crillo, V G, and Steelman, S L, *British Journal of Clinical Pharmacology*, 1977, 4, suppl 1, p 31.

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## Contact allergy to clotrimazole

Clotrimazole (Canesten; diphenyl-2-chlorophenyl-1-imidazolyl-methane) is an effective broad-spectrum antifungal agent that has been used in Great Britain since 1973. In clinical trials only a few patients have been irritated by clotrimazole and no cases of contact allergy have been reported. I describe a patient who developed contact allergic dermatitis to clotrimazole.

#### Case history

A 48-year-old policeman had had perineal and perianal pruritus for many years. In September 1977 he was prescribed Canesten cream, which he used intermittently for the next few months. In December, after applying Canesten cream, he noticed an increase in the pruritus accompanied by an erythematous, oozing rash over his scrotum, upper thighs, and natal cleft. He discontinued the Canesten, and Tri-Adcortyl cream was prescribed. His rash gradually improved.

Patch tests were applied for 48 hours using the Finn Chamber method and inspected at 48 and 96 hours. At both times reactions were seen to

Canesten cream, 1% clotrimazole in ethyl methyl ketone, and 1% ethylene diamine in yellow soft paraffin. Results were negative with Canesten cream base and Tri-Adcortyl cream.

#### Comment

Canesten cream consists of the active ingredient clotrimazole and the base, which contains Arlacel 60, Tween 60, spermaceti, Lanette 0, Eutanol G, benzyl alcohol, and demineralised water. During clinical trials of clotrimazole 1% cream Weuta<sup>1</sup> found irritation in 5% of patients. In clinical evaluations of clotrimazole, Spiekermann and Young<sup>2</sup> recorded adverse effects in 2.7% of patients, and Clayton and Connor<sup>3</sup> reported that 15% of patients using clotrimazole cream experienced transient burning and irritation. No cases of allergic contact dermatitis were reported. Wahlberg<sup>4</sup> obtained negative patch test results in patients with eczema using clotrimazole cream in concentrations 16 and 32 times greater than normal.

Only one case of patch-test-proved contact allergy has been reported (J Ward-Jenkins, Bayer UK Limited, personal communication). The present patient had patch-test-proved contact allergic dermatitis to clotrimazole. As this effective antifungal agent achieves more widespread use, more patients will be likely to develop allergy to clotrimazole.

<sup>1</sup> Weuta, H, *Drugs Made in Germany*, 1972, 15, 126.

<sup>2</sup> Spiekermann, P H, and Young, M D, *Archives of Dermatology*, 1976, 112, 350.

<sup>3</sup> Clayton, Y M, and Connor, B L, *British Journal of Dermatology*, 1973, 89, 297.

<sup>4</sup> Wahlberg, J E, *Münchener medizinische Wochenschrift*, 1976, 118, 76.

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(We suggest to readers that any suspected adverse reaction to a new drug should be reported to the Committee on Safety of Medicines, preferably on a yellow card. Serious or unusual reactions to all drugs should also be reported.)

## SHORT REPORTS

### Ingrowing toenails in infancy

Ingrowing of the great toenail is common in older children and adults, and is generally attributed to convex cutting of the nail.<sup>1</sup> A more complex theory has been put forward suggesting that there is an imbalance between the nail and cuticle borders due to incurving of the medial side of the toe, influenced by inherited architecture and compounded by pointed-toe and high-heeled shoes. Careless cutting back of the corners of the nail then initiates chronic inflammation.<sup>2</sup> The condition has not been described in infants, and we report two cases.

#### Case reports

**Case 1**—A 10-week-old boy presented with bilateral acute paronychia of the great toenails of two weeks' duration (figure). There was no reason to believe that he had been wearing tight clothes or shoes; his toenails had never been cut; and he did not suck his toes. There was a family history of ingrowing toenails: the patient's paternal grandmother had required removal of both great toenails at the age of 2 years, and a maternal cousin had required antibiotic treatment for redness of the great toes at the age of 4 months, suggesting ingrowth of the nails. The boy was treated by avulsion of both great toenails under general anaesthesia; the infection settled completely, but the nails grew inwards again within two months. Tin foil placed beneath the toenail margin was unsuccessful in stopping this, and the problem is as yet unresolved.

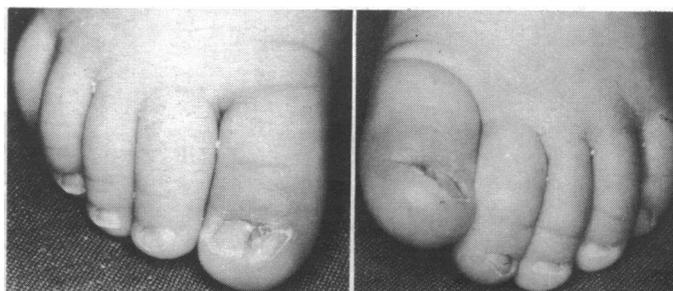
**Case 2**—A 6-week-old boy developed ingrowing of the right great toenail with surrounding inflammation, but no pus was produced. There was no family history. From birth he had been put down to sleep prone, and the changes in the toenail had occurred at the time when he had started kicking very actively. The condition was attributed to constant rubbing, and settled rapidly when he started to sleep on his back. Nevertheless, it recurred at the

age of 2½ years after he had been wearing narrow shoes; it responded to a course of co-trimoxazole.

#### Comment

In their analysis of ingrowing toenails in different age groups, Murray and Bedi<sup>3</sup> did not mention infants. The only suggestion of an inherited disorder in published reports, other than Lathrop's theory,<sup>2</sup> is by Chapman,<sup>4</sup> who describes a condition of overcurvature of the toenails as a result of which the nail cuts into the lateral nailfold; this occurs, however, in young adult life. Paronychia of the thumb may occur in infants as a result of sucking.<sup>5</sup>

The family history in case 1, and the recurrent nature of the condition in both cases, suggest that there may be an inherited tendency for the great toenails to grow inwards, perhaps requiring an additional



Case 1. Bilateral acute paronychia of great toenails.