persons (p=0.033). Eight of the 11 DLE patients sampled during the sunny season and 1 of 11 sampled during the winter were using antimalarial medication.

The forearm cis- and total UCA contents of the PLE patients did not differ significantly from those of control persons.

DISCUSSION
Cis-UCA has a suppressive effect on delayed hypersensitivity (1). Thus, the lowered epidermal cis-UCA content in UVR-protected buttock skin of DLE patients, demonstrated in our study, agrees with the proposal that DLE skin symptoms are caused by an augmented T-cell-mediated mechanism (2). Unexpectedly, contradictory results were found in PLE, which is also proposed to be mediated by a delayed hypersensitivity reaction (3).

We do not believe that sampling during different seasons skewed the results of non-protected buttock skin, since the cis- or total UCA values of control persons were unaffected by sun exposure of other skin sites (data not shown). In a recent Danish study, it was observed that the total UCA content in buttock skin was lower and the percentage of cis-UCA elevated during the summer compared with other seasons. Our differing result may be due to differing sampling period during the sunny season, i.e. before July in the present study vs. after July in the Danish study (7).

Unlike in UVR-protected buttock skin, there were no differences in cis-UCA contents between DLE patients and control persons in sun-exposed skin of the back of the hand. This may be due to the disease process itself. However, the possibility of a normalizing effect of antimalarial medication must also be considered, since the cis-UCA contents also tended to be higher in UVR-protected buttock skin of DLE patients on antimalarial medication than in non-medicated DLE patients.

REFERENCES

Accepted March 21, 1999.

Taina Hasan1, Paavo Pasanen2 and Christer T. Jansen3
1Department of Dermatology, University of Tampere and Tampere University Hospital, PO Box 2000, FIN-33521, Tampere, Finland. (E-mail: thasan@tays.fi), 2Department of Chemistry, University of Turku and 3Department of Dermatology, Turku University Central Hospital, Turku, Finland.

Chloramphenicol Induced Acute Generalized Exanthematous Pustulosis Proved by Patch Test and Systemic Provocation

Sir,
Acute generalized exanthematous pustulosis (AGEP) is characterized by sudden onset of high fever, generalized scarlatiniform erythema covered by numerous non-follicular, small superficial sterile pustules, blood leukocytosis with neutrophilia, and acute evolution (1 – 2). The main causative agent is drugs, but chloramphenicol has been rarely implicated (3).

Patch tests were performed in several cases of AGEP and results showing eczematous or pustular reaction were considered positive (2). Systemic provocation proved the cause in 1 case sensitive to isoniazid (4).

We here report a case of AGEP in which chloramphenicol was shown to be the cause by both patch test and oral provocation with a lowered dose.
performed 2 weeks after complete recovery with the ingested drugs, acetaminophen (10% in pet), codeine (0.5% in pet) and chloramphenicol (500 mg/ml, aq.). Eczematous reactions without any pustules developed at the sites patch-tested with codeine and chloramphenicol on days 2 and 4, respectively. Systemic provocation was performed to identify the causative drug and to confirm the results of patch testing after obtaining the patient’s approval. Re-administration of acetaminophen and codeine caused no skin eruption, even at therapeutic doses, indicating that the patch test result for codeine was false. However, intravenous injection of 50 mg (1/20 of a therapeutic dose) of chloramphenicol produced deeply red, oedematous, pruritic patches within 5 h, similar to the original early skin lesion on the face, back, anterior chest, abdomen, neck and part of the extremities.

DISCUSSION

Skin tests, including patch testing, sometimes give false positive or false negative reactions, especially if the concentrations are not appropriate and the vehicles unknown. A control study and skin biopsy of the patch test may help to eliminate the false reactions (2). Re-administration of the suspected drug in 1/10 – 1/20 of the usual dose can help to confirm the diagnosis. The interval between the systemic re-administration and provocation of the skin lesions might also be of importance to protect the patients from a serious outcome.

REFERENCES


Accepted April 8, 1999.

Ai-Young Lee and Sang-Hee Yoo
Department of Dermatology, Eulji Hospital College of Medicine, 280-1, Hagye-1-dong, Nowon-gu, Seoul 139-711, Korea. E-mail: lay5103@eulji.or.kr.