Letters

To the Editor

Acute generalised exanthematous pustulosis due to diltiazem

Sri Lanka Journal of Dermatology, 1999 - 2000, 4, 44-45

Sir, acute generalised exanthematous pustulosis (AGEP) is a rare entity whose clinical and pathological characteristics are distinct from pustular psoriasis. Occasional cases of (AGEP) are due to entero virus infection or hypersensivity to mercury, but most of the other reported cases are related to drugs, commonly antibiotics (betalactams and macrolides). However, there are reports of cases associated with other drugs¹, including six reported cases induced by diltiazem²⁻⁶ we report another case associated with diltiazem encountered in Sri Lanka.

A 35-year-old man who was under investigation for episodes of palpitations and giddiness was started on diltiazem in addition to atenolol. Two weeks later he developed sudden onset of a generalised erythematous papular eruption. Within 24-48 hours developed superficial pustules over sheets of erythema. There were lakes of pur seen over the anterior abdominal wall. There was no mucosal involvement. He had general malaise and severe musle pain of abdomen. There was no history of psoriasis nor of any previous drug reaction. Physical examination was otherwise normal.

Laboratory investigations were within normal limits, with the exception of a neutrophil leucocytosis. Bacteriological culture of pustules were negative. Skin biopsy revealed subcorneal collections of neutrophils, dermis was oedematous and displayed a diffuse infiltration of eosinophils and neutrophils. Diltiazem with atenolol were stopped and his cutaneous lesions resolved in one week.

In this case, the acute onset of generalised exanthematous pustular eruption, neutrophil leu-

cocytosis and the histological findings were typical of AGEP. Diltiazem was thought to have caused the eruption because of it's prior ingestion and the resolution of the skin lesions after the cessation of therapy. Atenolol was also given to this patient with diltiazem but it is not known to cause AGEP to our knowledge.

The main differences between AGEP and acute pustular psoriasis are in AGEP, in addition to pustules there could be purpura and erythema multiforme like target lesions, acute onset and short duration of illness, history of recent drug administration, history of previous drug reactions, past history of psoriasis and the histology which shows dermal oedema, perivascular eosinophils focal necrosis of keratinocytes in addition to subcorneal pustules¹.

Diltiazem has been associated with a variety of cutaneous reactions. These include cutaneous vasculitis, erythema multiforme, pruritic macular rash, photosensitivity, severe toxic erythema and pustular eruption⁷. Cutaneous reactions occur more frequently with diltiazem than with other calcium channel blockers⁶.

AGEP should be thought of in a patient presenting with an acute generalised pustular eruption specially when there is a history of drug administration as well.

References

- Roujeau JC, Bioulac-Sage P, Bourseau C, et al. Acute generalised exanthematous pustulosis. Analysis of 63 cases. Arch dermatol 1991; 127: 1333-8.
- 2. Lambart DG, Dalac S, Beer F, et al. Acute generalised

- exanthematous pustular dermatitis induced by diltiazem. Br J Dermatol 1988; 118: 308-9.
- 3. Janier M, Gerault MH, Carlotti, A et al. Acute generalised exanthematous pustulosis due to diltiazem. *Br J Dermatol* 1993 Sep; **129**(3): 354-5.
- Wittal R, Fischer G, Georgouras K, Baird P. Skin reactions to diltiazem. Australas J Dermatol 1992; 33: 11-8.
- 5. Wakelin S, James M. Diltiazem-induced acute

- generalised exanthematous pusulosis. Clin. exp. Dermatol. 1995; 20: 341-4.
- 6. Sandra Knowles, Aditya K. Gupta, Neil H. Shear. The spectrum of cutaneous reactions associated with diltiazem: three cases and a review of the literature. *J Am Acad Dermatol* 1998; **38**: 201-6.
 - Robert Stern, J H Khalsa. Cutaneous adverse reactions assoiated with calcium channel blockers. Arch Intern Med 1989; 149: 829-832.

T K Sripathy, C Senaratne, A HeenNilame, W D H Perera, Dermatology Unit, National Hospital of Sri Lanka.