

## Erythema Multiforme-like Eruptions Induced by Cytomegalovirus Infection in an Immunocompetent Adult

Sir,

Although erythema multiforme (EM) is known to be associated with a number of infectious and non-infectious diseases, it has rarely been reported to be associated with a cytomegalovirus (CMV) infection. We report here a case of CMV mononucleosis in a healthy adult who presented with EM-like eruptions as the initial symptom.

A healthy 23-year-old woman presented with a 2-day history of erythematous eruptions on the dorsa of the feet. She was otherwise asymptomatic and had taken no drugs for 4 weeks before the onset of the rash. There was no significant family or past medical history and she did not have herpes simplex infection. On examination, positive physical findings were confined to the skin. The dorsal aspect of the feet exhibited oedematous erythema with an annular configuration, which closely resembled EM (Fig. 1). Some lesions coalesced with adjacent lesions that had formed polycyclic patterns. In addition, a



Fig. 1. Erythema multiforme-like eruptions on the dorsa of the feet.

few lesions were also seen on her legs. There was no involvement of the mucous membranes and no joint or muscle complaints were observed. She had no fever or lymphadenopathy. Laboratory studies gave the following values: WBC 4200/ $\mu$ l, with a differential cell count of 36% neutrophils, 4% monocytes, 37% lymphocytes and 23% atypical lymphocytes. The platelet count decreased to  $10.7 \times 10^4$ / $\mu$ l. The biochemical parameters were normal, except for aspartate aminotransferase (AST; GOT) 215 IU/l; alanine aminotransferase (ALT; GPT) 276 IU/l; alkaline phosphatase 521 IU/l; and lactate dehydrogenase 934 IU/l. A high titre of IgM to CMV was detected by the EIA technique (7.24, normal  $>0.80$ ), thus indicating a recent CMV infection. Hepatitis screening, including tests for hepatitis A, B and C was negative. The titre of VCA IgM to Epstein-Barr Virus (EBV) and EBNA were, respectively,  $\times >10$  and  $\times 10$ . Auto-antibodies, such as antinuclear antibody, were all negative. A skin biopsy of the lesion revealed focal vacuolar degeneration of the basal layer, slight oedema in the papillary dermis and lymphohistiocytic infiltrate in the upper dermis, which were all consistent with EM. From the clinical and laboratory data, she was diagnosed to have CMV mononucleosis with EM-like eruptions. After symptomatic treatment with topical steroids (0.05% clobetasol propionate), the skin lesions gradually resolved after 2 weeks, leaving only slight residual pigmentation. The haematological and liver function abnormalities returned to normal 4 weeks after the onset of infection, suggesting spontaneous normalization to be the natural course of CMV mononucleosis. A rubelliform rash has been described in CMV mononucleosis which affects the lower legs and lasts up to 2 days. Other skin lesions may also occur, such as urticaria, erythema nodosum, purpura and cutaneous vasculitis, which appear as papules and plaques in a partly annular configuration. EM has only rarely been associated with CMV mononucleosis as far as we could ascertain based on a search of the literature (1, 2).

### REFERENCES

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2. Tsuruta D, Mochida K, Fukuda M, Kobayashi H, Nakagawa K, Hamada T. A case of cytomegalovirus mononucleosis. *Japanese J Clin Dermatol* 1994; 48: 1189–1192 (in Japanese).

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