

## Eruptive Pseudoangiomatosis: Three Cases in Korean Middle-aged Women

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Sir,

Eruptive pseudoangiomatosis (EPA) is a rare, self-limiting exanthem, which is known to occur primarily in children. The first reports on this disease can be traced back to 1969 when Cherry et al. (1) described acute haemangioma-like lesions occurring in children with echovirus infection. No skin biopsies, however, were performed.

In 1993, Prose et al. (2) proposed the term 'eruptive pseudoangiomatosis'. The first adult cases of the disease were reported in 2000 (3, 4). All the cases reported so far, regardless of the age of the patient, were from North America and Europe, while its occurrence in Asians has not previously been documented. We here report three cases of EPA, arising in middle-aged Korean women.

### CASE REPORTS

#### Case 1

A 52-year-old woman had bright red papules, measuring 2–4 mm in diameter, which were distributed on the face, neck, dorsum of the hands and feet, and on the arms and had been present for more than 20 days (Fig. 1). The patient had no previous history of respiratory illness. On physical examination, the papules were surrounded by blanched halos. A biopsy revealed oedema and lymphocytic infiltration around the telangiectatic capillaries in the upper dermis. No subjective symptoms were reported, no treatment was given, and the lesions persisted for a month until she was lost for follow-up.

#### Case 2

A 50-year-old woman visited our institution with asymptomatic, erythematous papules, 2–4 mm in diameter, on her extremities and face. This was the third attack in 2 months, and had started in July 2002. On each occasion the attack had lasted for about 2 weeks. No treatment was given, and no recurrence was noted in the following 3 months. A biopsy revealed normal epidermis. In the oedematous upper dermis, the telangiectatic capillaries were surrounded by lymphocytes (Fig. 2a). A sparse infiltrate of neutrophils and eosinophils was also noted.

#### Case 3

A 55-year-old woman had multiple red macules and papules, 2–3 mm in size, on both arms, which

produced mild pruritus. The patient had complained of seasonal recurrences in the past three autumns, lasting for about 2 months on each occasion. Her medical history revealed diabetes, for which she had been on medication for the past 8 years. Her laboratory findings were unremarkable, with the exception of elevated blood sugar. She was managed on oral antihistamines and topical methylprednisolone for 2 weeks, until the macules and papules had cleared. No recurrence was noted over the following 3 months. A biopsy revealed normal epidermis. In the upper dermis, the oedema, predominantly lymphocytic infiltration around the telangiectatic capillaries, and extravasated erythrocytes were found (Fig. 2b).

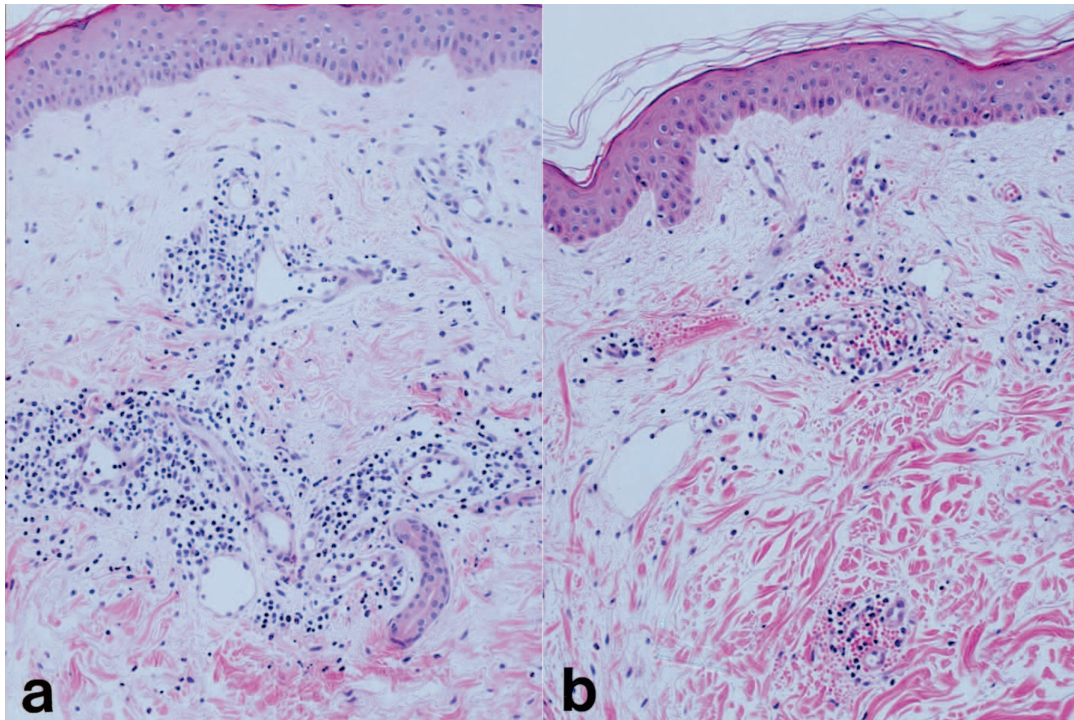
### DISCUSSION

Since the first description of EPA in 1969, a viral aetiology and a possible association with immunosuppression after renal allograft have been suggested (5). Some investigators have found positive serology for Epstein–Barr virus (3) and echovirus (1) in EPA patients, but Guillot & Dandurand (4), who noted that in adulthood the eruption occurred more commonly in females and lasted longer than in childhood, found no association with systemic episodes of fever or other symptoms suggestive of a viral aetiology.

In our adult cases of EPA, some features were remarkable. All three of these cases occurred in middle-aged females, and the onset was in late summer to early autumn. The association of seasonal occurrence might be a clue to an infectious cause, although none of our patients complained of any acute illness. Also, all patients, with the exception of one with diabetes, were free of drugs. Except for mild pruritus in one case there were no subjective symptoms in any of the patients.



Fig. 1. Erythematous papules on the forearms, surrounded by blanched halos (case 1).



*Fig. 2.* Predominantly lymphocytic infiltration around the dilated capillaries. (a) Note that the overlying epidermis is intact in case 2 (H&E  $\times 400$ ). (b) Some erythrocyte extravasations were also noted in case 3 (H&E  $\times 400$ ).

EPA is characterized by bright red papules, surrounded by a blanched halo. The differential diagnoses included viral exanthem, drug eruption, allergic vasculitis, papular urticaria and prurigo. Histopathologically, a moderate amount of lymphohistiocytic and occasional eosinophilic infiltrations around the superficial vessels are observed. In one of our cases, there was a sparse infiltrate of neutrophils, in addition to usual lymphocytic and eosinophilic infiltrations. In all the reported cases, the overlying epidermis was normal. The key histological feature is one of dilated blood vessels, with somewhat plump endothelial cells (not seen in our cases) but with no evidence of frank vascular proliferation or vasculitis (2), hence the term 'pseudoangiomatosis' applies.

EPA is a rather poorly established entity, and the precise nature of this vascular ectasia is still unclear. Previous studies have suggested a 'dermal hypersensitivity reaction' to viral infection (1), or a direct viral effect on the vascular endothelium (2). The one major

histological point that distinguishes EPA from other previously described dermal hypersensitivity reactions is capillary dilatation. However, more cases need to be studied to fully verify the aetiology of this emerging entity.

#### REFERENCES

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