Koebner Phenomenon in Classic Kaposi's Sarcoma

Sir.

The Koebner phenomenon has rarely been reported in Kaposi's sarcoma (KS). We report an unusual case of classic KS, which first appeared at the site of an autologous skin graft.

CASE REPORT

A 74-year old Greek woman was admitted to A. Sygros Hospital, University Clinic, in November 1993 with a 4-month history of a painless eruption on her left lower limb. Twelve months prior, she had undergone an autologous skin graft for a large wound, resulting from a fractured left calf. There was no history of prior use of immunosuppressive drugs, corticosteroids, or serious systemic disease.

Physical examination revealed a few reddish-violaceous nodulespapules and an infiltrated plaque with a rubbery consistency at the site of the skin graft (Koebner phenomenon) on the left anterior midcalf (Fig. 1). In addition, several similar lesions were observed on untreated areas of skin on the same leg, and local lymphoedema was evident. The patient reported that the lesions had first appeared at the site of the graft. The remaining physical examination was normal.

A clinical diagnosis of KS was made and confirmed histologically by a biopsy specimen of the lesion at the graft site. Serum tests for HIV were negative and cell-mediated immunity, as evaluated by T-lymphocyte subpopulations and the multi-test, was within normal limits. Classic KS was diagnosed. All other laboratory studies, including haematological and biochemical parameters, chest X-ray, bone X-rays, upper and lower endoscopy of the gastrointestinal tract and abdominal CT scan, were normal, thus ruling out internal involvement, bone involvement or association with other malignancies.

DISCUSSION

The Koebner phenomenon was first reported in KS in 1905 (1). Since then, there have been a few reports of KS developing at sites of trauma, insect bites, nail puncture wounds, repeated pressure, excoriations, scars, venipuncture and more recently at sites of surgery and skin grafts.

The case we presented is unusual because classic KS occurred at the site of an autologous skin graft. The lesions on the graft site were the first manifestations of the disease. Only 2 other cases that involved skin grafts have been reported, and both were in immunosuppressed patients (2, 3).

In this case, the appearance of classic KS on the autologous skin graft represents the occurrence of the Koebner phenomenon. Prolonged wound healing, resulting in haemodynamic disturbances, secretion of growth factors and angiogenesis, may be important mechanisms that lead to tumorigenesis.



Fig. 1. Kaposi's sarcoma at the site of a skin graft and local lymphoedema.

REFERENCES

- Weber FP, Daser P. Idiopathic multiple pigment sarcoma (idiopathic multiple haemorrhagic sarcoma) of Kaposi. Br J Dermatol 1905; 17: 135–139.
- French PD, Harris JRW, Mercey DE. The Koebner phenomenon and AIDS-related Kaposi's sarcoma. Br J Dermatol 1994; 131: 746–747.
- Schamroth JM, Ratanjee H, Kellen P, Jaques V, et al. Kaposi's sarcoma localized to the site of a previous vascular surgery. Arch Dermatol 1985; 121: 969–970.

Accepted March 26, 1997.

Irene Potouridou MD, Andreas Katsambas MD, PhD, Vassiliki Pantazi MD, Melina Armenaka MD, Anthony Vareltzidis MD, PhD and John Stratigos MD, PhD.

Department of Dermatology, University of Athens, 5 Ionos Dragoumi St., Gr-16121 Athens, Greece.