

Vitiligo at the Site of Radiotherapy for Malignant Thymoma

Sir,

Vitiligo, characterized by well-circumscribed white cutaneous macules devoid of identifiable melanocytes, can be caused by physical injury (the Koebner phenomenon) (1). We describe here a patient with depigmented patches that developed abruptly at the site of radiation following surgical removal of thymoma.

CASE REPORT

A 42-year-old Korean woman presented with depigmented patches on the anterior upper chest. She had undergone thymectomy for the management of malignant thymoma 6 months previously. Following surgery, radiotherapy had been carried out on her chest as adjuvant therapy. She had no past or family history of vitiligo. The prescribed dosage of radiation was 55 Gy, given in 31 fractions over 45 days using a 6 MV linear accelerator. Three months after completion of the course of radiation, white depigmented patches developed suddenly on the anterior upper chest and the site of the surgical incision (Fig. 1). Histopathological findings showed decreased melanin pigment in



Fig. 1. Depigmented patches in the area which had been treated with radiotherapy.

the basal layer of the epidermis, with mild perivascular inflammation in the dermis, and dopa staining showed no dopa-reactive melanocytes. These findings suggested vitiligo.

DISCUSSION

Because vitiligo can be associated with thymoma (2), our patient might be thought to have a predisposition to developing vitiligo. Cases of vitiligo following radiotherapy have been reported in patients with a history of vitiligo (3, 4), possibly resulting from the Koebner phenomenon. Our case suggests that radiation injury to the skin can trigger vitiligo in predisposed patients who have no history of vitiligo. Thus, the possibility of development of vitiligo in predisposed persons should be taken into account for patients who are candidates for radiotherapy prior to therapy, even if they have no history of vitiligo.

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