

Psoriasiform Eruption Localized to a Previously Irradiated Area

Atsuko Ohashi¹, Minoru Saiki² and Ryuhei Okuyama^{1*}

¹Department of Dermatology, Shinshu University School of Medicine, Asahi 3-1-1, Matsumoto, 390-8621, and ²Division of Dermatology, Nagano Municipal Hospital, Japan. *E-mail: rokuyama@shinshu-u.ac.jp
Accepted November 1, 2010.

Although irradiation is an important therapeutic modality, it occasionally induces various side-effects in the skin. We report here a case of psoriasiform eruption in the left cervical region, which corresponded approximately to the site that had been irradiated one month previously. The eruption may be a Koebner response induced by irradiation. In addition, the eruption appeared during use of roxatidine, a histamine H₂-receptor antagonist, and disappeared after its discontinuation, suggesting an association between the eruption and irradiation plus roxatidine.

CASE REPORT

A 54-year-old Japanese man with tongue carcinoma underwent partial resection of the tongue together with irradiation in 2005. His carcinoma was staged as stage I (T₁N₀M₀). In April 2009, he developed asymptomatic enlargement of the right cervical lymph nodes. He underwent right cervical dissection and received irradiation at a dose of 40 Gy to the right cervical region. Furthermore, he developed enlargement of the left cervical lymph nodes in September 2009. He underwent left cervical dissection of metastatic lymph nodes, followed by administration of cisplatin and 5-fluorouracil. He subsequently received 40 Gy of irradiation to the left cervical region between October and November 2009. On day 10 after completion of radiotherapy, he began taking roxatidine for epigastric pain at a dose of 150 mg daily. Three weeks after commencement of roxatidine administration, he presented with development of non-symptomatic eruptions in the left cervical region, which corresponded to the last irradiated field. Physical examination revealed well-defined, multiple erythematous lesions, 1–2 cm in diameter, with thick white scaling confined to the recently irradiated region (Fig. 1). There were no skin changes in the right cervical region, which was irradiated in April. He had no history of psoriasis. There were no abnormal findings on laboratory examination. After discontinuation of roxatidine, his lesions gradually recovered without any medication, and disappeared 3 weeks later, leaving only slightly dark pigmentation.

DISCUSSION

In this case, the psoriasiform eruptions developed in the irradiated skin area, suggesting that irradiation may have induced a Koebner response, defined as exacerbation of underlying skin disease following macro- or micro-trauma. In patients with psoriasis, flare-up occurs occasionally at the sites of irradiation after the radiotherapy for carcinomas (1–3). Although, the patient described here had no history of psoriasis, he may have had a genetic predisposition to develop psoriasis.

Because the eruption appeared first after taking roxatidine, irradiation appears to have altered the cutaneous homeostasis, leading to drug-induced eruption confined to the irradiated field. This case partially mimicked



Fig. 1. Well-defined erythematous lesions with thick white scaling on a previously irradiated area.

radiation recall dermatitis, which is a hypersensitivity skin reaction at sites of previous irradiation after administration of certain drugs that recovers on cessation of medication (4, 5). Radiation recall dermatitis occurs frequently after the use of chemotherapeutic drugs, including cisplatin and 5-fluorouracil. As it is also induced by non-cytotoxic drugs, roxatidine may be associated with the onset. However, the psoriasiform eruption was different from that usually seen in cases of radiation recall dermatitis, i.e. erythema, oedema, maculopapular lesions, desquamation, and severe skin necrosis.

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