



PHOTOTHERAPY, PHOTODYNAMIC THERAPY

THEORETICAL AND PRACTICAL CONSIDERATIONS UPON CUTANEOUS INJURIES SECONDARY TO RADIOTHERAPY

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Background: Radiotherapy (RT) is one of the most common methods of treatment in oncology with a curative role in many neoplasias or a palliative role in metastatic cancers. The muco-cutaneous lesions induced by ionizing radiation are significant and their severity varies considerably depending on the tissue radiosensitivity, the doses, the technique and other associated therapies. In acute radiodermatitis the ionizing radiations at dermal level cause damages in dermal vascularization and other intradermal structures and at epidermal level they affect the stem cells with secondary inflammatory process activation. Cutaneous manifestations include rash, xerosis, bleeding ulceration of minor local trauma or necrotic ulceration, alopecia on the affected area, acne-like dermatitis. Chronic radiodermatitis includes a spectrum of poikilodermatous changes (atrophy, telangiectasias, hypo- / hyperpigmentation), fibrosis and chronic ulcers with a risk of developing secondary malignant skin lesions (more common skin carcinomas), many years after RT.

Observation: We present 2 suggestive cases with chronic radiodermitis after RT for sarcoma and atypical vascular lesions after RT for breast cancer. In the first case, the lesions started late after RT, with poikilodermatous lesions and chronic, atonic ulcers, with no/poor tendency of healing. About 1 year intervals, repeated biopsies are required to capture the occurrence of squamous cell carcinoma or the sarcoma recurrence. All the skin biopsies were negative so far. In the second case, multiple infiltrative, red-violet nodules occurred 6 years after RT in the irradiated breast area. Histopathological and immunohistochemical exams confirmed the diagnosis of atypical vascular lesions, differentiating from Kaposi's sarcoma. At the 6-month follow-up visit the lesions were completely disappeared.

Key message: Considering the extensive use of RT in oncology practice, a good interdisciplinary collaboration (dermatologist-oncologist) and the knowledge of immediate and late post-RT reactions with prompt therapeutic intervention is required, especially in case of secondary malignant skin lesions.

