Treatment of Merkel cell carcinoma with radiotherapy and imiquimod (Aldara): a case report

Mario Balducci¹, Berardino De Bari², Stefania Manfrida¹, Giuseppe Roberto D'Agostino¹, and Vincenzo Valentini¹

¹Radiotherapy Department, Catholic University of Rome, Rome, Italy; ²Département de Radiothérapie-Oncologie, Centre Hospitalier Lyon Sud, Pierre Benite, France and EA3738

ABSTRACT

Aims and background. Merkel cell carcinoma (MCC) is a rare skin tumor occurring mostly in older people. Postoperative radiotherapy is strongly recommended to improve local control. A case of a MCC treated by radiotherapy associated with imiquimod (Aldara) is presented. A possible physiopathological rationale for this concomitant treatment is also given.

Materials and methods. We treated a diabetic 82-year-old man presenting with a MCC of the right zygomatic area. Despite surgery, postoperative ultrasonography showed a firm, painless residual mass of about 11×10 cm, fixed to the deep tissues. Parotid and zygomatic areas were treated along with the ipsilateral laterocervical lymph nodes. The total dose to the planning target volume was 50.4 Gy (1.8 Gy/day). Imiquimod was applied once a day to the zygomatic area with macroscopic infiltration and to the surrounding erythema.

Results. During the combination treatment, the patient showed acute G3 skin toxicity (RTOG) and a scab that resolved after a 3-week interruption of the radiotherapy and imiquimod treatment. When the scab was removed, the underlying skin appeared completely re-epithelialized. Imiquimod was suspended and treatment was continued only with irradiation. During this second phase of the treatment, the patient developed G2 dermatitis and G2 stomatitis. Clinical and instrumental re-evaluation showed a complete response 7 months after the end of radiotherapy, with very good local tropism.

Conclusion. This case report suggests the possible effective use of immunomodulators, in this case imiquimod, combined with radiation therapy for cutaneous malignancies such as MCC. Skin tolerance should be an important issue to consider. Free full text available at www.tumorionline.it

Key words: Merkel cell carcinoma, radiotherapy, imiquimod, MCC.

Correspondence to: Dr Berardino De Bari, Département de Radiothérapie-Oncologie, Centre Hospitalier Lyon Sud, 69310 Pierre Benite cedex, France.

Tel +33-4-78864251; fax +33-4-78864264; e-mail berardino.de-bari@chu-lyon.fr

Received August 25, 2009; accepted January 13, 2010.