Merkel Cell Carcinoma in Renal Transplant Recipient

M.	Marco	Formica ^a
B.	Bruno	Basolo ^a
L.	Loredana	Funaro ^a
G.	Gianna	Mazzucco ^b
G.P.	Giuseppe Paolo	Segoloni ^a
G.	Giuseppe	Piccoli ^a

Institutes of ^aNephro-Urology and ^bPathological Anatomy, University of Torino, Italy

Marco Formica, MD, Ospedale Giovanni Bosco – Divisione di Nefrologia e Dialisi, Piazza del Donatore di Sangue, 3, I-10154 Torino (Italy)

Dear Sir,

We describe the case of a 54-year-old man, with a cadaveric renal graft that had functioned for 3 years, who developed a chest skin lesion (noninflamed brown plaque with a irregular surface) which was surgically removed. The histological report, with a positive immunocytochemistry for chromogranin A, cytokeratin and neuron-specific enolase, revealed the presence of a Merkel cell carcinoma (neuroendocrine tumor). The mass had been widely resected, without regional lymphadenectomy, and radiotherapy was performed over the scar region (parasternum and periclavicular areas) for a total of 50 Gy in 25 sessions every other day.

At 15 months, the patient was free of local recurrences, regional and distant lymph node metastases. The immunosuppressive treatment was kept without a change (prednisone 0.15 mg/kg, cyclosporine A 3.8 mg/kg) and renal function remained normal with a mean creatinine of 97 $\mu\text{mol/l}$.

In September 1992 he developed a contro-lateral supraclavicular lymph node metastase of Merkel cell carcinoma which was surgically removed; the patient underwent a radiotherapy protocol as described above. No other lymph nodes were involved and no visceral localizations have been detected on the computerized tomography scan of the body. Immunosuppression was maintained at the same regimen because of the patient's decision.

Three months later (December 1992), a new nodular skin lesion, slightly extended in depth, was discovered in the left subcostal area; it was removed and neuroendocrine carcinoma features were again pointed out.

This time the patient was advised to progressively taper the prednisone dose to 5 mg/day and to reduce the cyclosporine A to 3 mg/kg. A radiotherapy protocol, based on 25 sessions of electrons superficial field (2 cm) for a total of 50 Gy, was performed.

Merkel cell carcinoma is a rare neuroendocrine-derived neoplasia of the skin, as demonstrated by immunocytochemical techniques [1], with a high incidence of local recurrences (40%) after surgical excision, and local or distant lymph node metastases (18-45%) [2]. Postoperative radiotherapy is advised, while in the presence of widespread metastases, chemotherapy (cyclophosphamide, doxorubicine, vincristine, prednisone, cis-platin) is suggested [3]; the prognosis of these latter patients is poor.

A second primary malignancy was found to be associated with the Merkel cell carcinoma in 9-16% of the cases, as described in one review [4], while a rare dissemination of the carcinoma with metastases to the testis [5] has been reported, apparently without any relationship with prostatic involvement.

Of note: in November 1988, 2 months after transplantation, the patient was hospitalized for endoscopic resection of a previously diagnosed prostatic adenoma. The histological report showed the presence of a highly differentiated in situ adenocarcinoma. Although no direct relationship between the two tumors is clearly established, a neuroendocrine differentiation in prostatic carcinoma has been described in about 47% of a series of 53 cases, with a higher prevalence in poorly differentiated neoplasia [6]; in our case, the immunocytochemical analysis performed on the prostatic specimen was negative and its prognosis quite good.

Thus the presence of such a rare Merkel cell carcinoma, with distant lymph node metastases, in one renal transplant recipient, in association with a second primary malignancy of the prostate seems noteworthy.

Skin lesions have to be carefully sought, investigated and followed up in patients on chronic immunosuppressive drug regimens, in order to detect any harmful lesions at an early time point. The link between Merkel cell and prostatic carcinomas does not seem to reach any causal pathogenetic value; however, the chance for prostatic carcinoma to display a neuroendocrine pattern is not unusual.

Radiotherapy in Merkel cell carcinoma seems to play a protective role just for local recurrence of the neuroendocrine tumor but pharmacological immunosuppression triggers the potential of the neoplasia to develop distant metastases.

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