Renal Cell Carcinoma of the Native Kidney in a Female Renal Allograft Patient without Acquired Cystic Kidney Disease

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Dear Sir,

In a recent paper, Ishikawa et al. [1] reported a case of renal cell carcinoma (RCC) of the native kidney after renal transplantation in a patient with acquired cystic kidney disease (ACKD). The same group had described regression of ACKD after kidney transplantation and suggested a 'protective' effect of transplantation against the development of RCC [2]. However, the absence of ACKD does not avoid the risk of RCC in transplant patients, and a trend toward a higher incidence of RCC in ciclosporin-treated renal allograft recipients has been described [3, 4]. Ciclosporin could compensate this possible 'protective' effect. We report here a case of RCC of the native kidney after renal transplantation and treatment with ciclosporin in a woman without evidence of ACKD.

A 37-year-old woman presented with right flank pain and fever in December 1990, after receiving a successful cadaveric renal transplant in March 1986. She had been on treatment with ciclosporin (3 mg/kg/day) and prednisone (10 mg/day), and the renal function was normal (serum creatinine 1.3 mg/dl). End-stage renal disease had developed in 1977, secondary to hemolytic-uremic syndrome, and she had been on hemodialysis since January 1978. On admission, her general condition was good, but physical examination discovered a right-sided abdominal mass. Computerized tomography revealed a left supraclavicular lymphadenopathy, a solid mass of 7 cm in the right native kidney with retroperitoneal lymphadenopathies and absence of renal cysts. Technetium scan did not show images suggestive of metastases. Right nephrectomy was performed, and histologic examination revealed the presence of an RCC in the upper pole, extended to perirenal fat and lymph nodes. Ciclosporin was tapered to minimal dose (1.2 mg/kg/day). A month later, the patient presented with bilateral supraclavicular lymphadenopathies and intense back pain. A new computerized tomography showed an irregular mass in the right renal fossa. Biopsy confirmed that the lesions were metastases and the patient was started on vinblastine and interferon- α -2A. However, the neoplasia rapidly grew, the patient's general condition deteriorated, and she died in April, 1991.

Our patient represents a new case of RCC of the native kidney after renal transplantation. Interestingly, the cases reviewed by Ishikawa et al. [1] and another well-documented case not included [5] occurred in males. Though there are reports without sex reference [6], ours could be the first female patient suffering from this disease. RCC is a well-known complication in the dialysis and transplant population, usually related to ACKD [1, 2, 5-8]. Renal cysts were not found in our patient neither in computerized tomography nor after careful histologic examination, but we cannot rule out the possibility of pretrans-plant existence of cysts [2]. This is the first case of RCC in our series of 430 kidney transplants, 203 on azathioprine and 227 on ciclosporin. Despite a longer follow-up in patients on azathioprine, RCC developed in 1 of our patients on ciclosporin. Though the occur-

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rence of this tumor may be a chance event, one could speculate on the possible contribution of ciclosporin, as it has previously been pointed out [3, 4]. Penn [3] has even suggested the possibility that RCC may constitute complications of the nephrotoxicity of ciclosporin. Prognosis is variable and seems to be poor if metastases emerge within the first 6 months after the primary operative procedure [8], as it occurred in our patient. The management of these patients is debated. Complete remissions have followed reduction of immuno-suppressive therapy in other malignancies such as ciclosporin-related lymphomas [9], but tapering ciclosporin dosage to achieve minimal blood levels did not alter the fatal evolution of our patient. Although successful treatment of metastatic RCC with interferon- α -2A and vinblastine has been reported [10], the progression was fulminant despite an initial decrease of metastatic lymph nodes. This report emphasizes the need of a periodic examination of native kidneys in renal allograft recipients, regardless of the existence of ACKD. Possibly, long-term follow-up of ciclosporin-treated graft recipients will increase reports of life-threatening tumors of internal organs and clarify any carcinogenic potential of the drug.

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