Dialysis in Patients with Bilateral Nephrectomy for Transitional Cell Carcinoma

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Dear Sir,

Transitional cell carcinoma (TCC) is a common malignancy of upper and lower urinary tract, most frequently occurring in the bladder. A small proportion of these patients develop a progressive multifocal disease that leads to bilateral nephrectomy and chronic renal failure [1]. Dialysis has been proposed for patients with bilateral nephrectomy for renal neoplasms, mainly renal cell carcinoma [2, 3], but there are few reports concerning prevalence and outcome of patients with TCC [4, 5]. Also, it is important to analyze which is the best timing to remove the kidneys in these patients.

We report on 4 patients who have undergone bilateral nephrectomy for multifocal TCC and were included in a hemodialysis program. Patient No. 1, a 62-year-old woman diagnosed as having TCC of the bladder in 1972. Between 1972 and 1976 she underwent six transurethral resections. In 1977 a cystectomy with bilateral ureterosigmoidostomy was performed (TP^Δi). A radical left ne-phroureterectomy was carried out in 1981 (TP|G₁). The right kidney was removed 6 years later and 1 regional node out of 9 was affected (TP2G2N|). Hemodialysis was instituted in July 1987. The sigmoid colon and the left hypogastric artery were invaded by an infiltrative urothelial carcinoma which was resected by an open-surgery technique in March 1991. The postoperative period was complicated by abdominal abscess, enterocutaneous fistula, and pulmonary thromboembolism. In spite of this, she remains well on dialysis since 6 years, and by now there is no evidence of

metastases. Patient 2, a 47-year-old man with a solitary kidney (renal agenesis), underwent right nephroureterectomy in February 1991 for TCC (TP2G₁N₁). The patient has been successfully placed on hemodialysis for 2 years and 4 months with no evidence of tumor recurrence. Patient 3, a 52-year-old man, presented in 1982 with a TCC of the bladder which was removed by transurethral resection. Eight reoperations were necessary due to local recurrences. A left nephroureterectomy was carried out in June 1984 and a right nephroureterectomy with cystoprostatectomy in October 1992. An infiltrating mass was found in the rectum (TP4G3N0). The patient has been on dialysis for 8 months, but has two hepatic metastases. Patient 4, a 41 -

year-old woman, underwent right nephroureterectomy for TCC in 1982. Between 1987 and 1992 several papillary tumors of the bladder were removed. In December 1992 a left nephroureterectomy with cystectomy was performed due to a recurrence (TP, G2N0). No affected regional nodes were found. She is now on dialysis (8 months) with no evidence of recurrent tumor.

Multifocal recurrent TCC is a progressive disease that may affect upper and/or lower urinary tract, and an incidence of bilaterality of 2-4% has been reported [1]. These tumors were traditionally managed by nephroureterectomy with removal of a cuff of the bladder [5]. But if patients develop progressive disease that leads to removal of both kidneys, they should be submitted to a hemodialysis program. The prognosis of dialysis patients with bilateral nephrectomy for renal cell carcinoma has been reported [2, 3, 6], but there are few reports concerning the outcome of patients with bilateral nephrectomy for TCC. Survival rates of 44% [3] and 16% [6] 5 years after bilateral nephrectomy for renal cell carcinoma have been reported, but in these series none of the patients had a TCC. Persad et al. [4] reported on 4 patients who underwent bilateral nephrectomy for TCC with a survival of 5, 8, 12, and 72 months on dialysis, respectively. The longest survival in our group presents a woman who still remains on dialysis after 6 years without evidence of metastases. One patient has been on hemodialysis for more than 2 years without evidence of tumor recurrence, and in 2 cases, the time on dialysis has been too short (8 months) to draw definitive conclusions. The quality of life in these patients was similar to the overall dialysis population, and the survival mainly will depend on stage and grade of the tumor at the time of diagnosis. In summary, hemodialysis is a good therapeutic option in patients with bilateral nephrectomy for TCC, and aggressive and potentially curative surgery must be promptly considered to avoid dissemination of the disease, especially in younger patients with a high life expectancy on hemodialysis.

Another important problem is when these patients undergo renal transplantation. Persad et al. [4] proposed a malignance-free period of at least 1 year before considering renal transplantation in patients with TCC. Although none of our patients received a re- ©1995S. KargerAG, 1 0028-2766/95/ 0691-0112\$8.00/0

nal transplant, we think that patients who underwent surgery for urothelial cancer must wait for a period of time before being considered for kidney transplantation. The optimal waiting period will depend on stage and grade of the tumor. It is possible that patients with low-stage and low-grade tumors may be transplanted after 2 years, but in patients with high-stage or high-grade tumors and also in those with lymphnode disease, a 5-year tumor-free period should be considered.

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