



Letters

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Phase II Study of Vinblastine and Doxorubicin in Advanced Renal Cell Carcinoma

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IN A REVIEW of 47 single chemotherapeutic agents, the highest response rate in advanced renal cell carcinoma was obtained with vinblastine, to which 45 of our 277 patients (16%) responded [1, 2]. However, Fosså and colleagues have recently reported only a 4% response rate [3].

Doxorubicin as a single agent has been reported to have some activity against renal cell carcinoma *in vitro* and *in vivo* [4, 5]. Herein we report our experience with a combination of vinblastine and doxorubicin in advanced renal cell carcinoma.

Between 1985 and 1988, 28 patients entered the study. The main inclusion criteria were histologically proven metastatic renal carcinoma, no prior chemotherapy, Karnofsky status of 60% or better, white blood cell count over $3 \times 10^3/\mu\text{l}$ and platelet count over $100 \times 10^3/\mu\text{l}$. Patient characteristics were relatively unfavourable: 43% (12) had multiple metastatic sites, 18% (5) liver metastases, 18% (5) bone involvement, and in 21% (6) the primary tumour had not been operated upon. Only 25% (7) had metastases limited to the lungs. 24 of the 28 patients (86%) had undergone previous treatment with surgery, radiotherapy and immunotherapy.

Doxorubicin (12 mg/m^2) and vinblastine (4 mg/m^2) were administered once a week. Therapy was discontinued when disease progressed or because of severe side-effects. In cases of remission or static disease with improvement of the patients' clinical condition, therapy was continued up to 12 months. Response to therapy was routinely evaluated at intervals of 2 months according to UICC response criteria [6]. Toxicity was evaluated using WHO criteria [7].

All 28 patients were available for response and toxicity. 1 patient achieved complete response (CR) (4%) and 4 patients (14%) partial response (PR); 8 patients (28%) had static disease and 15 patients (54%) progression (response rate: 19%; 95% confidence interval 5–33%). Median duration of response in the responders' group (CR and PR) was 14 months (range 5–106+). Median survival for all 28 patients was 10 months (range 1–124+), for the responders 19 months (18–106+), for those with static disease 26 months (5–124+), and for those with progressive disease 9 months (1–30).

The toxicity analysis based on 537 chemotherapy courses showed treatment to be well tolerated. For 17 patients, the dose, mainly the vinblastine dose, was reduced slightly (10–15%), generally due to leucopenia. No reduction was made during the first three courses. 14 patients experienced grade I–II leucopenia, 10 experienced grade III, but none experienced grade IV leucopenia. No cardiac, renal nor neurotoxicity was observed.

1 patient achieved CR with prolonged survival. In another patient, lung metastases and a large primary tumour decreased in size allowing nephrectomy to be performed. 1 patient had prolonged stabilisation during the treatment. After discontinuation of treatment, the lung metastases disappeared, and the patient is still living without evidence of recurrence (8.5 years). As there was no additional chemotherapy, this might represent spontaneous regression of metastatic lesions following removal of primary tumour [8].

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