Adjuvant Therapy with Sorafenib in Bone Metastases Bilateral Renal Carcinoma: A Case Report: Part II

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1. Discussion

More than 200,000 new cases of kidney cancer are diagnosed annually, and more than 100,000 deaths occur from this cancer each year worldwide [1]. Kidney cancer is the most lethal of urologic malignancies, with more than 40% of patients dying of their cancer [2]. In the last few years, the management of localized and particularly metastatic RCC has changed. In particular, the role of cytoreductive surgery and cytokine-based therapy and the emergence of new target therapies have revolutionized the therapeutic approach to metastatic RCC.

We report on an extreme case of bilateral and metastatic RCC in progression during cytokine-based therapy. Treatment of high-risk or metastatic RCC remains a challenge for the urologist and oncologist and probably it is destined to change in the coming years.

This patient was successfully submitted to radical left nephrectomy, right nephron-sparing surgery, and bone metastasis removal, followed by adjuvant therapy with the oral multitargeted tyrosine-kinase inhibitor (TKI) sorafenib, which inhibits the vascular endothelial growth factor and platelet-derived growth factor receptors. In a randomized, placebo controlled, phase III trial on cytokine-refractory metastatic RCC, sorafenib doubled median progression-free survival [3,4]. The encouraging results with sorafenib led to trials in patients with high-risk or metastatic RCC.

In this report we evaluated the role of sorafenib therapy, after cytoreductive renal surgery, in a patient with RCC and relevant risk factors for progression (bilateral tumour, bone metastasis, poor performance status), limited survival, and poor quality of life. Following prognostic nomograms the expected 1-yr cancer-specific survival for our patient was less than 6 mo [5]. At 12-mo follow-up, however, a symptomatic improvement in patient performance status and the absence of disease progression or of new metastatic sites produced an unexpected improvement in his survival and quality of life.

The analysis of results obtained by the use multitargeted TKI after surgery for RCC in high-risk and metastatic cases may also be justified to extend the actual indications for surgery in this neoplasm.
EU-ACME question

Sorafenib has been analyzed in phase III studies as a systemic therapy for metastatic renal cell carcinomas. This drug acts as:

A. an inhibitor of dendritic cells
B. immunotherapy
C. multikinase inhibitor
D. endothelin 1 inhibitor

Correct answer: C.

Sorafenib is an oral multikinase inhibitor that targets the mitogen protein kinase pathway and receptors of tyrosine kinases involved in tumour proliferation and angiogenesis.

References