LETTERS TO THE EDITOR

A case of complete clinical response with sorafenib in a patient with thyroid gland metastases from renal cell carcinoma 17 years from diagnosis

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To the Editor: Advanced renal cell carcinoma (RCC) has a poor prognosis when surgically untreatable. Medical treatment remains unsatisfactory. Target therapies may provide alternative options and, among them, sorafenib may improve the progression-free survival compared with standard treatment[1,2]. We report a complete clinical response following sorafenib treatment in a 74-year-old man with thyroid metastases from RCC 17 years from diagnosis.

The patient underwent extended total right nephrectomy in 1990 with no further postsurgical treatment; histological examination revealed RCC (pT2, pN0, G2, R0, stage II).

A computed tomography (CT) scan in December 2004 showed lymphadenopathy in the right lateral cervical area in proximity to the right thyroid lobe. Total thyroidectomy was performed. Histology revealed thyroid metastases from RCC with neoplastic thrombosis and microfoci of papillary thyroid carcinoma. Histological examination showed comparable features to the original diagnosis in 1990. Only few such cases have been described[3,4].

MRI and PET-CT scan in April 2006 showed a right paralaryngeal cervical mass with neoplastic thrombosis and areas of non-specific increased uptake in the lung (max 1 cm). Right lateral cervical node and internal jugular vein dissection (level II-V) was performed in June 2006. Histology showed neoplastic thrombosis of the jugular vein from RCC and neoplastic foci in the dissected mass with negative lymph nodes; also in this case the histology was similar to the original diagnosis. While the appearance and evolution of the cervical mass were consistent with papillary thyroid carcinoma, histology revealed RCC.

In September 2006 MRI and PET-CT scan showed residual cervical mass activity. In January 2007 sorafenib was started at 800 mg daily but discontinued after 2 weeks because of grade 3 skin toxicity. It was later resumed at 400 mg. After reaching 800 mg over a 2-week period, administration was again discontinued because of skin toxicity (grade 3) and later resumed and continued for 8 weeks when it was finally stopped again for skin toxicity. In the course of approximately 5 months a total of 13 weeks of therapy were administered, 3 weeks at full dosage and 10 weeks at reduced dosage. In August 2007 PET-CT scan and MRI showed complete remission of the lateral cervical mass.

Several preclinical trials have shown that sorafenib, a multiple kinase inhibitor[5,6], blocks angiogenesis and neoplastic proliferation of various tumors[7]. Although approved for treatment of RCC, complete clinical recovery has been rarely described[8]. In the case reported here, PET-CT and MRI documented the disappearance of all lesions after approximately 5 months of treatment at variable doses. We are presently planning administration of reduced-dose maintenance therapy for response consolidation.

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