Intermittent treatment with sunitinib may achieve complete response in metastatic renal cell carcinoma

Dear Editor,

Renal cell carcinoma (RCC) constitutes about 2-4% of all adult tumors. Previously, interferon, interleukin and cytotoxic agents were generally used in metastatic RCC despite their limited activity.

Sunitinib is a tyrosine kinase inhibitor that mediates angiogenesis. Vascular endothelial growth factor (VEGF) and platelet-derived growth factor (PDGF) are the angiogenetic factors which maintain the tumor growth. Studies have suggested that sunitinib therapy is associated with longer survival compared with interferon-alpha therapy in metastatic RCC [1-3]. However, there is very little information in the literature about the intermittent use of sunitinib and the relationship with treatment response and prognosis in this disease. Herein, we present a patient with multiple lung and bone metastases from RCC that completely disappeared with intermittent use of sunitinib.

An irregular tumor mass, 5×4 cm in diameter, was detected with abdominal ultrasonography in a 65-year-old male who presented with right quadrant pain in 2005. The tumor was diagnosed as stage I (T1bN0) RCC after right radical nephrectomy. Distant organ metastasis was not determined. However, the patient was readmitted to hospital complaining of left arm pain in 2008, after an uneventful 3-year follow-up period. Whole body bone scan showed metastatic lesions localized to the proximal segment of the left humerus, left 6th and right 7th ribs. The lesion in the humerus was resected and diagnosed as RCC metastasis. Palliative radiotherapy (total dose 30 Gy) was delivered to the tumor region and sunitinib 50 mg/day per os was commenced. After 6 months of therapy the patient achieved complete response. However, weakness, persistent nose bleeding and hypertension attacks emerged and repeated blood counts revealed anemia and thrombocytopenia. Sunitinib therapy was stopped and the patient was followed without therapy for 10 months. In 2009 the patient presented with cough and shortness of breath. Multiple diffuse metastatic nodules in both lungs and multiple bone metastases were detected with computerized tomography (CT) scan of the thorax (Figure 1a) and bone scintigraphy (Figure 2a). Sunitinib treatment was restarted and radiological and scintigraphic evaluation showed that the metastases in the lungs and bones had completely disappeared after 3 months of therapy (Figure 1b and 2b). The patient is still free of disease for 12 months.

In the medical literature, only scarce reports appear with metastatic RCC responding completely with intermittent use of sunitinib.

Severe weakness, nose bleeding, anemia, thrombocytopenia, depigmentation of hair and skin and hypertension attacks are reported during sunitinib therapy. Depending on the severity of the side effects, the physician should choose between dose reduction or therapy discontinuation.

Tyrosine kinase inhibitors may increase response rates and prolong survival in metastatic RCC patients [4,5]. The present case shows that intermittent sunitinib therapy can achieve a complete response in patients with metastatic RCC and can also be an alterna-

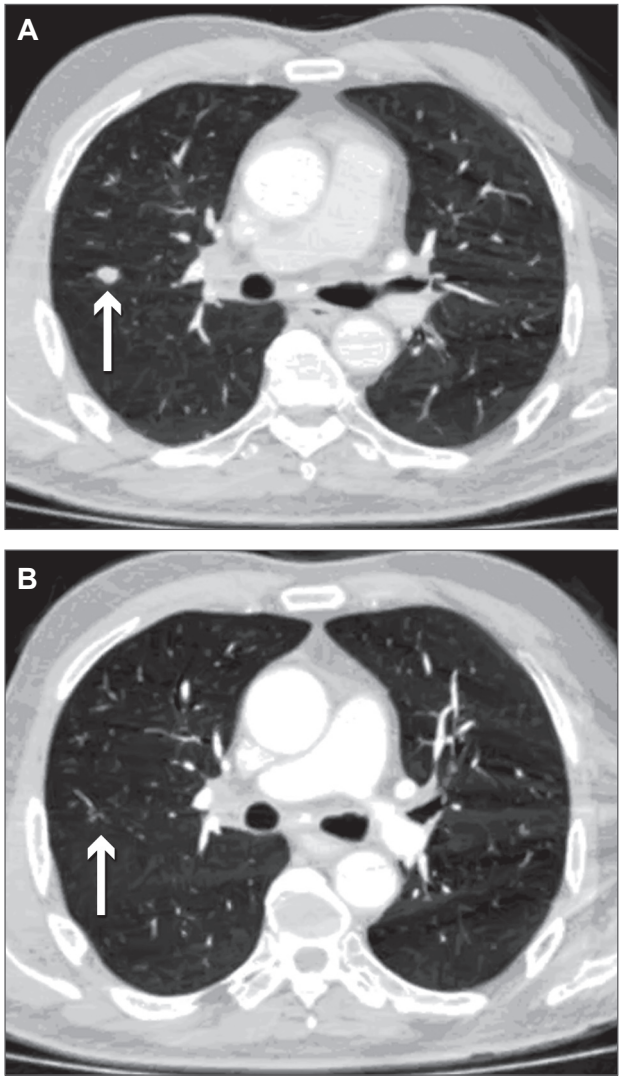

Figure 1. A: CT scan showing one of the lung metastases (arrow); **B:** complete response of lung metastasis after sunitinib treatment (arrow).

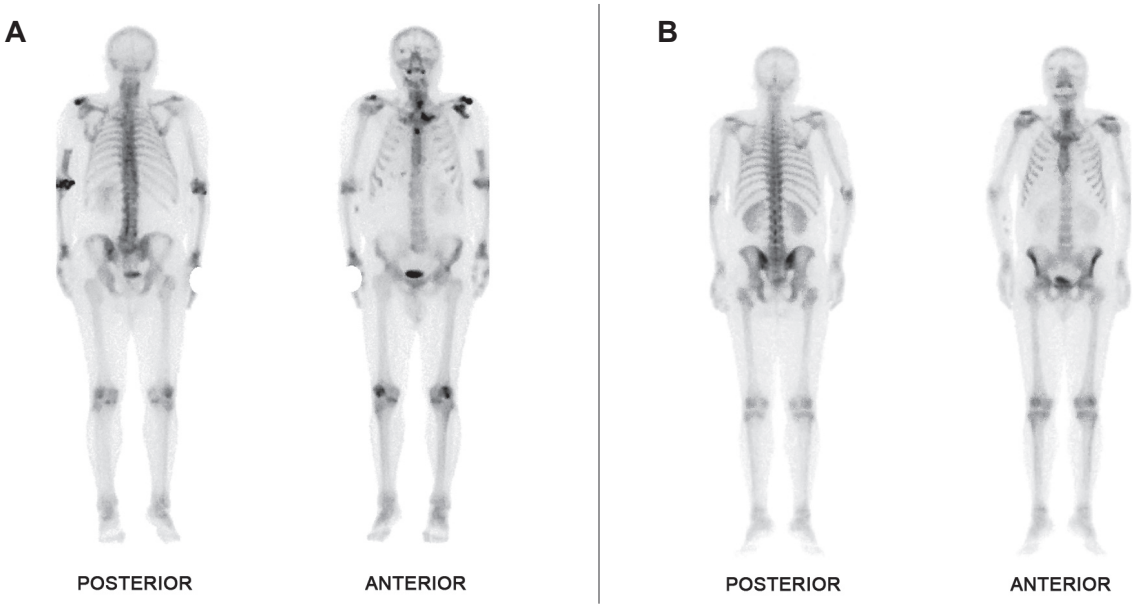

Figure 2. A: bone scintigraphy showing multiple bone metastases; **B:** complete response of bone metastases after treatment.

tive regimen in patients who suffer from severe adverse effects of the drug.

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Late recurrence of granulosa cell tumor of the ovary with synchronous gastric signet-ring cell carcinoma

Dear Editor,

A 65-year-old nulliparous lady had a history of right ovarian cyst detected by a transvaginal ultrasound 10 years ago. She had a total abdominal hysterectomy and bilateral salphingo oophorectomy. The pathological diagnosis was granulosa cell tumor (GCT) of the ovary. Three cycles of adjuvant paclitaxel-cisplatin chemotherapy were administered. After 9 years, she complained of dyspepsia and heartburn. An endoscopic biopsy from a gastric ulcer revealed a signet-ring cell gastric carcinoma. Total gastrectomy and esophagojejunostomy were performed and, since cancer was at an early stage, she did not receive adjuvant chemotherapy. Two months after the operation a follow-up abdominal CT scan revealed a mass in the right ovarian space. Exploratory laparotomy showed a nodular lesion at the round ligament of the right ovarian space. Biopsy of this lesion