Interstitial nephritis in a patient taking sorafenib

Sir,

Sorafenib (Nexavar, Bayer-Onyx) is an oral multi-targeted kinase recently approved by the FDA for the treatment of advanced renal cell cancer (RCC). This treatment has been associated with an increased number of adverse events, as compared with placebo [1], but no renal failure has been noted. We report on a patient who developed a renal insufficiency related to acute interstitial nephritis (AIN) while taking sorafenib.

A 66-year-old male presented with a 2-day history of nausea and facial erythema. This episode began approximately 10 days after taking 200 mg of sorafenib, given orally twice daily for metastatic RCC. This treatment was prescribed after the failure of an 8-month sunitinib treatment (stopped one month previously). His past medical history included nephrectomy, hypertension and chronic renal failure. In the phase 3 study against placebo [1], skin toxicity and diarrhoea were the main limiting toxicities reported. Erythema of the face, scalp and upper thorax were reported (40% and 16% with sorafenib and placebo, respectively) [1].

In large retrospective series, AIN represented 2–3% of all native renal biopsies [2], was drug-related in 92% of cases [3], and is associated with a generalized cutaneous rash in 25–30% [2, 4].

In this report, we cannot totally eliminate the role of sunitinib in the occurrence of this nephrotoxicity, although that possibility seems unlikely in view of the temporal relation with the use of sorafenib.

This case of AIN should serve as a warning that the use of sorafenib may be associated with renal injury. We suggest careful monitoring for urinalysis and serum creatinine of patients receiving sorafenib, especially those with dermatologic events.

Conflict of interest statement. None declared.

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Fig. 1. Interstitial inflammation by lymphocytes and few plasma cells leading to a focal tubulointerstitial nephritis (A) Masson’s trichrome; original magnification ×200. The lymphocytes population is polymorphous with T and B cells; immunohistochemical staining CD3 (B) and CD20 (C).