Rituximab is an alternative in a case of contra-indication of cyclophosphamide in Wegener’s granulomatosis

Sir,

We read with interest the report by Ferraro et al. [1] on the effectiveness of rituximab in refractory Wegener’s granulomatosis (WG). We report a case of relapsing WG with remission under rituximab, whereas cyclophosphamide was contra-indicated.

WG was diagnosed in February 2002 in a 57-year-old hypertensive patient with fatigue, renal failure (creatinine 334 μmol/l), haematuria and serum PR3-ANCA at a titre of 1090 U/ml (positive >20). Renal biopsy disclosed necrotizing glomerulonephritis. High dose corticosteroids and 12 cyclophosphamide pulses resulted in remission, but renal insufficiency led to dialysis. Maintenance therapy with azathioprine was given from August 2002 to July 2003. In February 2004, relapse occurred with fatigue and haemoptysis related to alveolar haemorrhage, with positive PR3-ANCA at a titre of 200 U/ml. Corticosteroids and a first cyclophosphamide pulse were administered but stopped because platelet count fell at 74 000/mm³. The alkaline phosphatase level was 334 UI/l (normal <100). Portal hypertension was demonstrated with grade II oesophageal varices due to veno-occlusive disease associated with nodular regenerative hyperplasia of the liver, probably induced by azathioprine. The patient received four weekly administrations of 375 mg/m² of rituximab, inducing complete remission. Mycophenolate mofetil (1.0 g/d) was subsequently administered as maintenance therapy. No relapse has occurred to date.

This case highlights the interest of rituximab in WG, in the case of contra-indication of cyclophosphamide. A few case reports show that rituximab is effective in WG [1–3], but prospective studies are necessary in order to evaluate its indications, since rituximab seems favourable as compared to other drugs.

Conflict of interest statement. None declared.

Sir, Although uncommon, percutaneous renal biopsy can precipitate acute renal failure from ureteral obstruction, hypertension or parenchymal compression by perinephric haematoma [1–4]. We report a case of acute renal failure following percutaneous renal biopsy resulting from torsion and kinking of the main renal artery secondary to anatomic displacement of the affected kidney by a large retroperitoneal haematoma.

A 50-year-old man with a history of diabetes mellitus, hepatitis C and orthotopic liver transplantation presented with renal insufficiency of several months duration. The patient’s blood pressure was 128/49 mmHg, serum creatinine concentration (Scr) was 1.8 mg/dl and the urine albumin to creatinine ratio was 3.5 mg/mg. Additional serological work-up, renal sonogram and urine microscopy were unremarkable. Three months later, the Scr had increased to 2.6 mg/dl and a percutaneous kidney biopsy was performed.

Following the biopsy, the patient developed decreased blood pressure and increasing left flank pain. An emergent
Computed tomography (CT) scan revealed a 9.5 × 9.4 cm haematoma extending from the lower pole of the left kidney into the left pelvis. Surgical evacuation of the haematoma was not advised due to the high risk for infection. The patient’s hospitalization was marked by continued bleeding and transient acute renal failure with a peak Scr of 3.8 mg/dl. The patient was discharged on the ninth day of hospitalization, at which time his Scr was 3.1 mg/dl. His blood pressure had increased to 177/89 mmHg for which hydralazine and metoprolol were prescribed. Findings on the renal biopsy suggested tacrolimus nephrotoxicity and diabetic glomerulosclerosis.

Three weeks later, the patient was readmitted with oedema, dyspnoea and somnolence. The Scr had increased to 5.3 mg/dl, urinalysis demonstrated 4+ blood and 4+ protein, and microscopic analysis was unremarkable. Renal sonogram demonstrated a 26 × 14 cm retroperitoneal haematoma extending caudally from the left kidney with no hydronephrosis. Renal replacement therapy with intermittent haemodialysis was initiated.

Work-up included a MAG3 renal scan showing an asymmetric decrease in renal blood flow and function in the left kidney (split function: 16% left, 84% right). Subsequent magnetic resonance angiography revealed anterior and superior displacement of the left kidney by the haematoma with kinking of the left renal artery at the level of the ostium (Figure 1). Vascular surgery consultation advised against surgical revascularization because of the high risk for infection. The patient was discharged with the continued requirement for renal replacement therapy. A CT scan 4 months after the biopsy demonstrated an evolving left retroperitoneal haematoma unchanged in size or anatomic location with continued cephalad displacement of the left kidney.

In conclusion, this case demonstrates a new complication ascribed to percutaneous kidney biopsy; anatomic displacement of the kidney from a haematoma resulting in torsion and kinking of the ipsilateral main renal artery and subsequent ischaemic nephropathy.

Conflict of interest statement. None declared.

Renal toxicity of Oxaliplatin

Sir,

Oxaliplatin is an antitumoral agent derived from platinum (trans-1,2-diammino-cyclo-hexane-platinum) with cytotoxic activity against a number of solid tumours, including colorectal cancer and metastatic ovarian carcinoma. Renal side-effects are unclear. We report the second case of acute renal failure following the use of oxaliplatin.

A 69-year-old woman was referred to our nephrology unit because of anuric acute renal failure. She had a history of ovarian adenocarcinoma treated in June 2001 by hysterectomy, ovariectomy and chemotherapy. Carboplatin and paclitaxel (six cycles) had been stopped in November 2001. In November 2002, oxaliplatin (85 mg/m²) and gemcitabine (1.5 g) were introduced. Three months before presentation, serum creatinine was 73 μmol/l (0.8 mg/dl).

On admission, after 10 cycles of oxaliplatin and gemcitabine, her blood pressure was 120–70 mmHg and she weighed 47.5 kg. Physical examination was normal. Serum creatinine was 1126 μmol/l and blood urea was 44.1 mmol/l. Haemoglobin was 9.8 g/dl and platelets were 64,000/mm³. Haptoglobin was 1.27 g/l. Renal sonography finding was normal. No monoclonal component could be detected in the blood. Circulating immune complexes, antinuclear antibody, rheumatoid arthritis haemurglutinin titre, antitubular basement membrane antibody and antineutrophil cytoplasmic antibody were negative. The patient required three haemodialysis sessions. On renal biopsy, severe tubular necrosis was observed with denudation of tubular basement membranes, cell fragments and red cells in the tubular lumen, and cellular dismorphism (Fig. 1). In the interstitium, only mild oedema was observed without cellular infiltration. Most of the glomeruli are ischaemic. Immunofluorescence study did not show specific deposits. Six weeks after admission, serum creatinine level was 1.09 mg/dl (120 μmol/l). Six months later, serum creatinine level was still 89 μmol/l (1.0 mg/dl).

In this case, oxaliplatin is very likely to have been responsible for acute renal failure. There was a close temporal relationship between the onset of renal failure and