Letters

Acute Interstitial Nephritis with Nephrotic Syndrome After Intake of Naproxen and Amoxycillin

Sir,

Acute interstitial nephritis associated with nephrotic syndrome has been reported with the use of different drugs: non-steroidal anti-inflammatory drugs (NSAIDS), antibiotics, lithium, interferon, etc. However, this clinical syndrome is very rare (55 cases were reported in world literature in 1988) [1]. Moreover, after withdrawal of the drug, a total or at least partial recovery of renal function usually occurs.

We would like to report an unusual case with a similar syndrome observed after simultaneous absorption of naproxen and amoxycillin. Progressive deterioration of renal function led our patient to chronic haemodialysis.

A 44-year-old man, without any pathological antecedent, ingested naproxen for 4 days (4 g) and amoxycillin for 10 days (24 g) with N-acetyl cysteine, for acute pneumonia with thoracic pain. During the following weeks, oedema increased progressively, accompanied by a 12kg weight gain. Hypertension at 180/120 mmHg was observed 1 month later.

Upon admission, the biological values were as follows: urea, 90 mg/100 ml; creatinine, 4 mg/100 ml; protein, 4.5 g/100 ml (with 37% albumin); cholesterol, 456 mg/100 ml; triglycerides, 471 mg/100 ml; leukocytes, 6200/mm³, with eosinophilia 2%-6%; normal complementaemia and daily proteinuria of 3.5-20 g.

The renal biopsy revealed normal glomeruli with typical lesions of acute interstitial nephritis and mild fibrosis.

After fluid restriction and diuretic therapy leading to a weight loss of 10 kg, the patient was discharged from the hospital in view of the rather good prognosis of this non-oliguric acute renal failure. Creatinine clearance was about 20 ml/min at that time.

Three months later, the patient was again admitted with major oedema and a serum creatinine of 7.7 mg/100 ml. Despite a creatinine clearance of 5 ml/min, the average daily proteinuria was 15 g.

A second renal biopsy demonstrated a pejorative evolution with tubulointerstitial and glomerular sclerosis.

The patient was then commenced on chronic haemodialysis with a residual diuresis of 300-1200 ml/day. A daily proteinuria of 2-20 g without any monoclonal component was noted. Fortunately, he was successfully grafted a few months later.

This case seems very unusual. Indeed, the nephrotic syndrome with renal failure occurred after a short period following simultaneous administration of naproxen and amoxycillin. To our knowledge, this is the first clinical report where such syndrome followed oral administration of a NSAID and an antibiotic. In the literature, two cases have involved the successive intake of two NSAIDS, respectively ibuprofen and indomethacin in the first [2] and tolmetin and naproxen in the second [3]. In these two cases, deterioration of renal function was noted. Pathogenic implication of T and B lymphocytes in NSAID-induced nephropathy has been demonstrated with characterisation of interstitial infiltrates using monoclonal antibodies and polyvalent antisera [4].

A cumulative effect of two drugs may therefore be proposed to explain the deterioration of renal function. However, these immunological mechanisms are actually not valid for other drugs such as antibiotics. Nevertheless, in the case of our patient, the combination of naproxen and amoxycillin may be incriminated. If so, the specific role played by each drug in the progressive deterioration of renal function remains to be assessed. Furthermore, the mild interstitial fibrosis noted at the first renal biopsy may have constituted an additional precipitating factor.

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Acute Intravascular Haemolysis Associated with an Indwelling Haemodialysis Catheter

Sir,

Anaemia is an exceedingly common problem in patients suffering from chronic renal failure. Factors responsible for this anaemia include inappropriately reduced concentrations of erythropoietin, iron or folate deficiencies, and a mild chronic haemolysis. Patients on haemodialysis may have aggravation of this anaemia with repeated blood loss and more rarely because of acute haemolysis [1]. We would like to...