patients’ nephrotic syndrome with treatment of the plasma cell dyscrasia further adds to our premise that their glomerulonephritis was caused by their myeloma.

Conflict of interest statement. None declared.

Editorial Note: Dr Komatsuda et al. had no further comments on this letter.

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doi: 10.1093/ndt/gfp032

Advance Access publication 4 March 2009

Natural killer cells in continuous ambulatory peritoneal dialysis patients

Sir,
You have published a very interesting paper by Vacher-Coponat et al. [1] indicating that haemodialysis (HD) duration and renal function are factors influencing natural killer (NK) cell count and NK cell activity in HD patients. Lower cell counts characterize immune disorders in HD patients. In our study [2], we determined the influence of continuous ambulatory peritoneal dialysis (CAPD) course on lymphocyte subset count (SLC) including lymphocytes T (CD3), lymphocytes B (CD19), helper lymphocytes (CD4), cytotoxic-suppressor lymphocytes (CD8) and NK cells (CD16+56). Uraemic patients started CAPD therapy with decreased SLC, excluding NK cell count that was within the normal range in the predialysis period. In the first year of CAPD therapy, a significant increase in SLC and CD4:CD8 ratio was observed, concomitantly an improvement in nutritional status. In the following years, CD3, CD4, CD8 and CD19 cell counts decreased, but not NK cell count. In patients on CAPD for more than 36 months, an increase in the number of NK cells over the normal range was shown. An increase in NK cells above the normal range may reflect chronic sterile or infectious inflammatory response, which stimulated NK cells. That finding accords with the study performed in CAPD patients by Palop et al. [3]. When the examined patients were distributed according to age, decreasing values of SLC with ageing in younger (35.5 ± 5.4 years) and older (67.2 ± 5.1 years) CAPD groups were shown, but age did not influence a number of NK cells [4]. In this study, a decrease in SLC was significantly related to CAPD duration only in younger patients: negative correlations were seen between dialysis duration and CD3, CD19 and CD4. NK cell count was not associated with CAPD duration neither in younger nor in older patients.

Treatment of CAPD patients with angiotensin-converting enzyme inhibitors (ACEIs) can influence lymphocyte count over the course of CAPD. In our study [5], patients receiving ACEI demonstrated negative correlation between summarized ACEI (enalapril, captopril, perindopril) dose and NK cell count. In this study, correlation was not seen between NK cells count and erythropoietin dose.

There were no associations between NK cell count and underlying kidney diseases, gender, intake of main food components, residual renal function, dialysate protein losses and CAPD adequacy, but there was negative correlation between NK cell count and blood urea nitrogen [6].
Data of Vacher-Coponat et al. [1] and our studies indicate that NK cells are unique lymphocyte subset that may show a different pattern in HD and CAPD patients.

Conflict of interest statement. None declared.

Editorial Note: Dr Vacher-Coponat et al. had no further comments on this letter.

Letter and Replies

Advance Access publication 4 March 2009

Poor awareness of chronic kidney disease in patients with acute coronary syndrome—challenge for cardiologists and nephrologists

Sir,

In the last issue of Nephrology, Dialysis and Transplantation, we read with great interest a review by Charles A. Herzog regarding kidney disease in cardiology [1]. In this article, the author highlighted three clinically relevant topics concerning acute kidney injury in patients with ischaemic heart disease, use of statins in chronic kidney disease (CKD) and ischaemic heart disease in patients with end-stage renal disease. In our opinion, this review omitted an important area, namely the poor awareness of CKD in patients with acute coronary syndrome (ACS) and cardiologists taking care of them. However, this very important topic is not often present in the literature.

Epidemiological studies of recent years focused on the increased cardiovascular morbidity and mortality in patients with chronic kidney disease [2]. It was found that CKD is not only an important cause of arterial hypertension, left ventricle hyperthrophy and anamneta but also a risk factor for the development of accelerated arteriosclerosis and atheromatosis of both coronary and peripheral arteries (cardio-renal syndrome) [3]. Reddan et al. documented that almost 40% of patients with ACS suffer from at least stage 3 of CKD [4]. Therefore, we have performed a study that aimed to evaluate the awareness of CKD and effectiveness of the referral process to nephrologists in patients with ACS.

The survey involved 150 patients (78 women and 72 men) with ACS referred to the cardiology unit [Table 1]. Patients were treated noninvasively or underwent urgent primary coronary intervention when TIMI Risk Score was equal or over 5 points. For each patient, detailed anamnesis concerning cardiovascular and kidney diseases and nephrological care was obtained. Based on estimated eGFR (MDRD formula) and urine analysis, CKD was diagnosed in 137 (91.3%) patients with ACS. eGFR <60 ml/min/1.73 m² was found in 29.3%, while proteinuria over 1 g/l in 9.3% of all patients with ACS. None of those patients was treated by a nephrologist before the occurrence of ACS. The most frequently previously undiagnosed CKD was diabetic nephropathy (53%). After discharge from the cardiology unit, patients with diagnosed stages 3 and 4 of CKD or proteinuria over 1 g/l were referred to nephrologists. One-third of patients (n = 16) refused immediately. Finally, documented nephrological care during the 1-year follow-up period was undertaken only in 16 out of 48 initially referred patients (33.3%) (excluding 4 patients who died).

Our results clearly indicate the poor awareness of CKD in patients with ACS. What is especially sad, is that even diagnosis of CKD in stages 3 and 4 or significant proteinuria did not convince two-thirds of CKD patients for initiation of the nephrological care, which is cost free for patients in Poland. The question arises why one-third of patients denied to be referred and another third of them did not reach the nephrology outpatient clinic? Perhaps, they were