Matters arising


Authors’ reply: Our study of circulating T cell subtypes was designed to eliminate the known biological, technical and pharmacological factors which might distort the results. We did not find any difference between patients with polymyalgia rheumatica/giant cell arteritis (PMR/GCA) before the initiation of glucocorticosteroid therapy, and age and sex matched controls.

Eling and colleagues take issue with our conclusion that the reported depletion of CD8+ T cells in patients with PMR/GCA has been proven to be constant. They are also concerned about the enumeration of lymphocyte subtypes after Ficoll-Hypaque separation of mononuclear cells.

An advantage of the results of Ficoll-Hypaque separation is that in normal individuals it has been demonstrated that 13–3% of lymphocytes are lost from the interface to the bottom of the tube, and that this fraction contains an increased proportion of CD8 cells.

Direct comparison has shown that the percentage of CD8 cells measured after Ficoll-Hypaque separation may be significantly reduced compared with that after use of a whole blood technique, and this effect is evident in the absence of CD8 cells. Therefore, the results of our study may not be comparable to the absence of any CD8 cell depletion in our study was the result of milder disease in our study group.

Even in this group, there was no difference in the percentage of CD8 cells. The reduction in CD8 cell count was small (0.5 ± 1.9% compared with 0.49 ± 1.0% in controls) and simply reflected a slight decrease in total lymphocyte count, from a median of 1.67 ± 10^3/μl in controls to 1.42 ± 10^3/μl in patients (a change of 15%), which is comparable to the 13% reduction in total lymphocytes described previously by Eling and colleagues when unmixed PMR patients were compared with controls. We do not feel that this small change is of any biological significance, but the finding explains the small reduction in the absolute CD8 count, in the absence of any change in T cell proportions.

In summary, we remain of the opinion that the reported depletion of CD8 cells remains to be proven. Studies after Ficoll-Hypaque separation of mononuclear cells are complicated by the possibility of differential migration of T cell subtypes in control and study groups. However, if such a difference proves to be the explanation for the discrepancy in the results of T cell subtypes in PMR/GCA, characterisation of the basis for this observation may be of value.

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Silicon nephropathy and myeloperoxidase antibodies

We read with interest the article by Sanchez-Romans and colleagues describing a high prevalence of clinical and biological autoimmune manifestations in 50 workers after occupational exposure to silica. In 1990 at the 3rd International Antinuclear Antibody Workshop, we first described three silicotic patients with renal involvement in a group of 28 ANCA positive patients. By contrast, no ANCA were found in seven silicotic patients without renal involvement. A 54-year-old patient with lupus-like syndrome without renal abnormalities, and in another with lupus-like syndrome and focal and segmental glomerular sclerosis (FSGS). The three patients differed from those previously reported with silicon nephropathy, usually of the rapidly progressive glomerulonephritis (RPGN) type. All three were slate workers and had a proven pulmonary silicosis. They did not fulfill the criteria for RPGN, either clinically (two had stable chronic renal failure) or histologically (no diffuse extra-capillary proliferation). All had ANCA with myeloperoxidase (MPO) reactivity, which are more frequent in RPGN. Patient 1 (table) had focal and segmental hyalinosis with stable renal function over eight years. MPO-ANCA were always present in a stored frozen serum obtained at the beginning of the renal disease. Patient 2 had FSGS with mild renal failure. MPO-ANCA were detected when he developed end stage renal failure with fatal pulmonary haemorrhage one year later. Patient 3 had a mild proteinuria with a stable advanced chronic renal failure of unknown aetiology (no biopsy).