

Correspondence

Antineutrophil cytoplasmic autoantibodies and clinical phenotype in patients with Churg-Strauss syndrome

To the Editor:

In a recent article, Healy et al¹ investigated the relationship between antineutrophil cytoplasmic autoantibody (ANCA) status and clinical expression of Churg-Strauss syndrome (CSS) in a case series derived from the US Food and Drug Administration's adverse events database.

There were 38 (40.9%) of 93 cases with positive ANCA results, of which a positive ELISA result was reported in 15 cases, all of which included positive anti-myeloperoxidase (MPO) results. ANCA negativity was associated with an increased proportion of cardiac involvement, gastrointestinal involvement, pulmonary infiltrates, the outcome of a life-threatening event or death, and a decreased proportion of peripheral neuropathy when compared with anti-MPO-positive cases.

They concluded that the presence or absence of MPO-ANCA influences the clinical expression and disease severity in patients with CSS.

Their findings are in substantial agreement with those reported by Sablé-Fourtassou et al² and Sinico et al³ in terms of ANCA prevalence (40.9% vs 38% and 37.6%, respectively) and of clinical associations.

Healy et al¹ recognized that their results are mainly confirmatory of previous reports supporting the hypothesis that ANCA status segregates with clinical phenotype, but outlined that this was the only case series investigating the clinical expression of CSS in relation to ANCA in which a positive indirect immunofluorescence (IIF) assay result required confirmation by ELISA.

We cannot agree with this statement. We are well aware that international guidelines recommend that positive IIF ANCA results should be verified by using an ELISA.^{4,5} Indeed, in the article by Sinico et al,³ the presence of ANCAs was determined in all 93 patients at the time of diagnosis by using IIF on ethanol-fixed granulocytes and antigen-specific proteinase 3 and MPO ELISAs. Antigen-specific ELISAs were performed on all serum samples. Moreover, ANCA serology was tested first in each hospital and rechecked centrally in a laboratory that participated in the European Commission/Community Bureau of Reference study for ANCA assay standardization.³ ANCAs were present, as determined by using IIF, in 35 (37.6%) of 93 patients; of those, 30 had positive anti-MPO and 3 had positive anti-proteinase 3 results, with only 2 with negative results by means of ELISA.³ In the article by Sablé-Fourtassou et al,² "ELISA assay showed that serum specimens of 34 of 39 patients

with perinuclear ANCA (5 patients' specimens were not tested) had anti-MPO specificity."²

More recently, similar results were obtained by Baldini et al⁶ and Oka et al,⁷ who found anti-MPO antibodies in 15 (39%) of 38 and 8 (36.4%) of 22 patients, respectively.

Concerning peripheral neuropathy, it is true that it is less prevalent in patients with negative ANCA results,^{2,3,6} but more importantly, the pathogenetic mechanisms seem different in the 2 subgroups: possibly ANCA-related vascular fibrinoid necrosis and a toxic eosinophilic effect on nerve fibers that is independent of ANCA.⁷

In conclusion, Healy et al¹ confirm that ANCAs (mainly with specificity for MPO) are present in approximately 40% of patients with CSS and that ANCA status correlates with organ involvement, even though some associations should be verified in more numerous case series.

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