Clinical analysis of patients with myeloperoxidase antineutrophil cytoplasmic antibody-associated vasculitis

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ABSTRACT. This prospective study analyzed the clinical characteristics of myeloperoxidase antineutrophil cytoplasmic antibody (MPO-ANCA)-associated vasculitis and explored the relationship between MPO-ANCA and clinical manifestations of the associated vasculitis in 132 p-ANCA and MPO-ANCA-positive patients (average age, 62.3 ± 14.8 years) who were initially diagnosed with ANCA-associated vasculitis. The p-ANCA and MPO-ANCA levels in peripheral blood were detected in all patients. Among these, 128 (97%) had microscopic polyangiitis (MPA), 3 (2.3%) had granulomatous polyangiitis, and 1 (0.7%) had eosinophilic granulomatous vasculitis. The average time of diagnosis was 10.2 ± 18 months; only 14 (10.6%) patients were diagnosed within 1 month. The main organs involved and the corresponding number of patients were: renal, 95 (72%); lung, 89 (67.4%); joints, 35 (26.5%); heart, 26 (19.7%); peripheral nerve, 23 (17.4%); skin rash, 14 (10.6%); and CNS, 13 (9.8%). Older patients were more likely to show lung involvement in the early disease stage, whereas the joints were involved mostly in the younger patients. The p-ANCA levels (mean titers, 1:60) were not correlated with disease activity and extent of organ...
involvement, and the MPO-ANCA levels were positively correlated with disease activity, but had no correlation with the extent of organ involvement. MPO-ANCA vasculitis is a common occurrence in China; it mainly involves the elderly and presents as clinical manifestations of MPA. However, the multiple organ damage is not specific leading to delay in diagnosis. MPO-ANCA may play a pathogenic role in the associated vasculitis, and the diverse clinical manifestations might be related with the different characteristics of MPO-ANCA.

**Key words:** Antineutrophil cytoplasmic antibody; Clinical damage; Antimyeloperoxidase antibody; ANCA-associated vasculitis; Pathogenic mechanism