Eosinophilic granulomatosis with polyangitis (EGPA): Clinical and immunologic expression in a single center cohort

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Introduction. The purpose of this study was to determine whether epidemiologic, clinical, and analytical features might modulate disease expression in a single center cohort of patients with eosinophilic granulomatosis with polyangitis (EGPA).

Methods. Patients with a diagnosis of EGPA made according to the 1990 ACR classification criteria for the disease were enrolled in this retrospective study. Data collected included: gender; age at diagnosis; age at inclusion; cumulative clinical features retrospectively assessed according to the Birmingham Vasculitis Activity Score (BVAS) glossary. The following parameters were also recorded: eosinophil count, ANCA status, rheumatoid factor (RF) positivity. Statistical analysis was performed using SPSS 13 (SPSS Inc., Chicago IL, USA). A 2-tailed value of $P < 0.05$ was taken to indicate statistical significance.

Results. Forty-seven EGPA patients (23F; mean age 47 ± 15 yrs; mean follow-up 7 ± 5 yrs) were enrolled. The prevalence of the clinical and laboratory features observed in our EGPA cohort was consistent with the larger cohorts of the literature. More specifically, ANCA-MPO were detected in 21/47 (44%) patients. Statistical analysis showed that EGPA female patients had a lower frequency of nasal polyps ($P = 0.02$) and a higher frequency of arthro-myalgias ($P = 0.05$), urticaria ($P = 0.008$) and RF positivity ($P = 0.03$). Elderly-onset patients had a higher prevalence of mononeuritis multiplex or polyneuropathy ($P = 0.001$). Finally, the subset of patients with ANCA-MPO positivity had less frequent cardiac manifestations ($P = 0.04$) and a higher prevalence of relapses ($P = 0.006$).

Conclusion. Epidemiologic and immunologic features have a significant impact on the clinical presentation of EGPA, influencing the prevalence and diversity of systemic involvement and should be taken into account in the assessment of EGPA patients in the clinical setting.

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