Pleuropulmonary involvement in patients with systemic lupus erythematosus from a Latin American inception cohort (GLADEL).

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Abstract

Objectives: The objectives of this study were to examine the demographic and clinical features associated with the occurrence of pleuropulmonary manifestations, the predictive factors of their occurrence and their impact on mortality in systemic lupus erythematosus (SLE) patients.

Materials and methods: The association of pleuropulmonary manifestations with demographic and clinical features, the predictive factors of their occurrence and their impact on mortality were examined in GLADEL patients by appropriate univariable and multivariable analyses.

Results: At least one pleuropulmonary manifestation occurred in 421 of the 1480 SLE patients (28.4%), pleurisy being the most frequent (24.0%). Age at SLE onset ≥30 years (OR 1.42; 95% CI 1.10–1.83), the presence of lower respiratory tract infection (OR 3.19; 95% CI 2.05–4.96), non-ischemic heart disease (OR 3.17; 95% CI 2.41–4.18), ischemic heart disease (OR 3.39; 95% CI 2.08–5.54), systemic (OR 2.00; 95% CI 1.37–2.91), ocular (OR 1.58; 95% CI 1.16–2.14) and renal manifestations (OR 1.44; 95% CI 1.09–1.83) were associated with pleuropulmonary manifestations, whereas cutaneous manifestations were negatively associated (OR 0.47; 95% CI 0.29–0.76). Non-ischemic heart disease (HR 2.24; 95% CI 1.63–3.09), SDI scores ≥1 (OR 1.54; 95% CI 1.10–2.17) and anti-La antibody positivity (OR 2.51; 95% CI 1.39–4.57) independently predicted their subsequent occurrence. Cutaneous manifestations were protective of the subsequent occurrence of pleuropulmonary manifestations (HR 0.62; 95% CI 0.43–0.90). Pleuropulmonary manifestations independently contributed a decreased survival (HR: 2.79 95% CI 1.80–4.31).

Conclusion: Pleuropulmonary manifestations are frequent in SLE, particularly pleuritis. Older age, respiratory tract infection, cardiac, systemic and renal involvement were associated with them, whereas cutaneous manifestations were negatively associated. Cardiac compromise, SDI scores ≥1 and anti-La positivity at disease onset were predictive of their subsequent occurrence, whereas cutaneous manifestations were protective. They independently contributed to a decreased survival in these patients.