

Mortality and causes of death in systemic lupus erythematosus over the last decade: Data from a large population-based study

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ABSTRACT

OBJECTIVE

To assess mortality rates (MRs), standardized mortality ratios, and causes of death in systemic lupus erythematosus (SLE) in a population-based study.

METHODS

We analyzed linked administrative health databases of the Veneto Region (Italy, 4,900,000 residents). SLE was defined by any hospital diagnosis or healthcare copayment exemption for SLE. We analyzed mortality from January 1st, 2012, until December 31st, 2021. MRs per 1000 were stratified by year, sex, and age group. Standardized mortality ratios were derived by comparing MRs of the general regional population. Causes of death were coded using the ICD-10 coding system and they were grouped in: SLE, infectious diseases, cardiovascular diseases (CVD), cancer, or others.

RESULTS

Among 4283 SLE prevalent cases, 603 deaths occurred, corresponding to an average annual standardized MR of 18.6 per 1000 person/year (95% CI 17.0-20.2). Out of 1092 incident SLE patients, 90 died with a peak in the first year after diagnosis (MR 26.5 per 10,000 person/month). Standardized mortality ratio was 2.65 (95% CI 2.13-3.26) overall, and highest among younger patients (<45 years: 5.59, 95% CI 2.05-12.4). Five- and 8-year survival were 91% and 89%, respectively. About half of the deaths had CVD or cancer as underlying cause, whereas infections were less frequently reported.

CONCLUSIONS

Although the medium-term survival since diagnosis is good, SLE mortality is still higher than that of the general population, especially in youngest patients. Nowadays, CVD seems to be the major cause of deaths in SLE, whereas infections account for a low proportion of deaths, at least in Western countries.

Keywords: Cancer; Cardiovascular diseases, Infections; Mortality; Standardized mortality ratio, Causes of death; Survival; Systemic lupus erythematosus.

FULL TEXT

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