The Association of Psoriatic Arthritis with All-Cause Mortality and Leading Causes of Death in Psoriatic Arthritis

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Background
Data on the association between PsA and mortality remains conflicting as it has been hampered by small sample size with few events and the potential for confounders of selection and severity biases from clinic-based studies.

Aim:

To examine the association between PsA and all-cause mortality from a population-based large database.

Methods

PsA Patients from the Clalit Health database were identified between 2003-2018 and matched to 4 controls by age, sex, ethnicity and index date. Patient's Demographics, comorbidities and treatments were extracted. Mortality data was obtained from the Notification of Death form. The proportionate mortality rate (PMR) of the leading causes of death was calculated and compared to the general population. Cox-proportional hazard regression models were used to estimate the crude and the multivariate adjusted hazard ratio (HR) for the association between PsA and all-cause mortality, and for factors associated with mortality within the PsA group.

Results

5275 PsA patients and 21,011 controls were included and followed for 7.2±4.4 years. The mean age was 51.7±15.4 years, and 53% were females. 38.2% of PsA patients were on biologics. 471(8.9%) patients died in the PsA group compared to 1,668(7.9%) in the control group. The crude HR for the association of PsA and all-cause mortality was 1.16(95%, CI 1.042-1.29) and 1.096(95%, CI 0.977-1.229) on multivariate analysis. Malignancy was the leading cause of death (26%), followed by ischemic heart disease (15.8%) in keeping with the order in the general population. Male sex, increased body mass index, Charlson comorbidity index scores and history of hospitalization in a year prior to death were positive predictors for mortality.

Conclusions

No clinically relevant increase in mortality rate was observed in PsA patients, specific PMRs were similar to the general population.