DESCRIPTIVE ANALYSIS OF THE INFECTION'S OCCURRENCE IN A MULTICENTRIC COHORT OF PATIENTS WITH RHEUMATOID ARTHRITIS IN BRAZIL – THE REAL STUDY

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BACKGROUND

Infections are common among patients with rheumatoid arthritis (RA) and often limit immunosuppressive treatment. They can be influenced by factors related to treatment, characteristics of the rheumatic disease and patients' clinical and social conditions. The aim of this study was to describe the incidence and types of severe infections in this cohort.

METHODS

The REAL study was a nationwide, multicenter, prospective study that collected data from patients with RA from 11 tertiary care centers. All centers are reference for the care of rheumatic patients in the Brazilian public unified health system (SUS). Data were collected between August 2015 and May 2017 at three timepoints—inclusion in the study, after 5 to 7 months from baseline and after 11 to 13 months from baseline. Collected data included: demographic characteristics, socioeconomic conditions, lifestyle habits, RA disease characteristics, nonarticular manifestations, comorbidities, biometrics, disease activity index, inflammatory laboratory tests, functional capacity, use of medications and the occurrence of serious infections over a year of observation. The REAL study included 1,115 patients over the age of 18 who met ACR 1997 or ACR/EULAR 2010 criteria for RA. For the present study, 262 patients were excluded due to loss of follow-up and 12 due to lack of sufficient data on the occurrence of infection. Serious infections were defined as those that required hospital admission or the use of intravenous antibiotic therapy.

RESULTS

Over the observation period there were 89 serious infections in 75 patients (10.8%); 5 of these patients had three infections over the observation period and 9 had two infectious events. The main site of infection was the urinary tract, corresponding to 37.3% of total infections (28 events), followed by lower airway infections corresponding to 26.6% of total infections (20 events). Other infection sites were upper airway (11 events, 14.6% of infections), bone or joint infections (8 events, 10.6% of infections), skin infections (14 events, 18.6% of infections) and other sites (11 events, 14.6% of infections). No infection that met the criteria for sepsis was recorded.

CONCLUSION

Serious infections occurred in 10% of patients over the 12-month observation period. This finding is close to data published in American and British cohorts. Further statistical analysis of data from the REAL study will be performed in order to better elucidate the main risk factors for the occurrence of serious infections in patients of the cohort.

KEYWORDS

Rheumatoid arthritis, Infections, REAL study.