**Introduction**

Rheumatoid arthritis (RA) is a progressive, incapacitating, multifactorial systemic inflammatory disease of autoimmune origin. Its most common form of presentationis bilateral symmetrical polyarthritis, which causes articular damage, deformity, and consequent disability. Its extra-articular manifestations are associated with a less favourable prognosis as they are heterogeneous and can affect a wide range of organs.1

RA’s chronic course leads to high morbidity and mortality, resulting in the deterioration of patients’ quality of life. Some factors are associated with an unfavourable prognosis, including the presence of rheumatoid factor and/or anti-CCP antibodies, high disease activity, and a delay in referral to a specialist physician and consequent delay in diagnosis.2

The diagnosis was mainly clinical and made according to the 2010 American College of Rheumatology/European League Against Rheumatism (ACR/EULAR) classification criteria for RA.3

The thorough assessment of patients with suspected rheumatoid arthritis is fundamental to confirming the diagnosis, monitoring the disease, and predicting disease outcomes. This assessment should include a tender and swollen joint count, an assessment of disease activity, pain (through visual scales), functional capacity (through validated questionnaires and testing levels of acute phase reactants like CRP or ESR) and structural damage (through radiographical images of hands). 4

Disease progression can cause deformities and disability in patients who present with RA, turning it into a public health issue, especially in Latin American countries where it is becoming increasingly prevalent.5

The objective of this study is to evaluate and describe the clinical and immunological characteristics, state of disease activity, and functional capacity in a cohort of Ecuadorian patients with RA.

**Materials and methods**

A cross-sectional, descriptive study was carried out in a population of Ecuadorian patients with a pre-established diagnosis of rheumatoid arthritis according to the 2010 ACR/EULAR classification criteria.6 The patients came from either public or private rheumatology clinics in the cities of Quito, Guayaquil, Manta, and Portoviejo.

A database was created to gather patient information, which included the following variables: demographic data, clinical symptoms, comorbidities, habits, and treatment. The disease activity of patients was assessed using their DAS28-CRP disease activity score, which evaluates the number of tender joints (out of 28), the number of swollen joints (out of 28) and requires the patient to rate their pain using a visual analogue scale. The DAS28-CRP was calculated using the DAS score program version 1.1.7 Patients with a score of <2.6 were classified as in remission, 2.6-3.2 as having low disease activity, 3.2-5.1 moderate disease activity, and >5.1 high disease activity.

The approved Spanish version of the HAQ-DI questionnaire, validated in 1993, was used to assess patients’ functional capacity and to establish their degree of disability. The questionnaire consists of eight categories and has a scoring system of 0-3. Patients with an average score of >1.25 were considered to be disabled and those with a score of 3 were considered severely disabled.7 Patients completed the questionnaire in their native language.

The obtained data were analysed using the software SPSS v.22, which calculated measures of central tendency (mean) for quantitative variables and descriptive statistical measures, like absolute and relative frequencies, for qualitative variables. The OR was calculated (CI 95%), as was the Pearson correlation coefficient with Fisher transformation in the study group. A two tailed p<0.001 value was considered statistically significant.

**Conclusions**

The study population is the largest cohort of patients with rheumatoid arthritis in Ecuador. Clinical characteristics did not differ greatly from those of the populations of other investigations, bearing in mind that there haven’t been many descriptive studies of this disease in Latin America. The biggest is probably the GLADAR study, which shows a very similar reality to the Ecuadorian study.

It must be concluded that the analysed cohort had very high, incapacitating disease activity, as close to 50% of the patients presented with DAS28 levels that indicated between moderate and high activity. This last piece of data is connected to the average delay of 29 months until the assessment of a rheumatologist, and consequent late diagnosis and treatment.

**Competing interests**

*The authors declare no conflict of interests.*