Original Investigation

The epidemiology of rheumatoid arthritis in a cohort of Colombian patients

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ABSTRACT

Background: Rheumatoid arthritis (RA) is a chronic autoimmune disease with an estimated prevalence of between 0.8% and 1.0%. It is most common in women. Epidemiological RA data in Colombia is scarce. The objective was to determine epidemiological and pharmacological characteristics of a population diagnosed with RA across 5 Colombian cities between the years 2009 and 2013.

Methods: A descriptive study was developed that used information from medical records at a rheumatology patients care facility. The records were identified according to the keywords "rheumatoid arthritis". The socio-demographic, clinical, para-clinical and pharmacological variables were then recorded. The analysis was performed using IBM SPSS-22.0 software.

Results: Out of a total of 1364 patients, disease prevalence was estimated at 0.15%, with a mean age of 53.2 ± 13.9. The symptoms started at 41.3 ± 14.0 years old, and 81.9% were women. The DAS-28 (Disease Activity Score in 28 joints) mean was 3.46, and 12.9% of the patients were smokers. Osteoporosis (32.3% of patients) and high blood pressure (32.1%) were the most common comorbidities, while methotrexate was the most prescribed medication (98.4%).

Conclusions: This is the first study in Colombia to use a large cohort in order to gather valid information that establishes clinical characteristics, disease behavior, comorbidities, and medication trends in the country.

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Epidemiología de la artritis reumatoide en una cohorte de pacientes colombianos

R E S U M E N

Palabras clave:
Agentes antirreumáticos
artritis juvenil
artritis reumatoide
epidemiología
metotrexate
Colombia (DeCS)

Antecedentes: La artritis reumatoide (AR) es una enfermedad crónica autoinmune, cuya prevalencia se estima en 0,8–1,0% y es más frecuente en mujeres. Los datos epidemiológicos sobre AR en Colombia son escasos. El objetivo fue determinar las características epidemiológicas y farmacológicas de una población con diagnóstico de AR, en 5 ciudades de Colombia, durante los años 2009 a 2013.

Métodos: Se realizó un estudio descriptivo a partir de la información de historias clínicas de una institución de atención a pacientes reumatológicos. Se identificaron según la palabra clave artritis reumatoide y se identificaron las variables socio-demográficas, clínicas, paraclínicas y farmacológicas. El análisis se hizo mediante IBM-SPSS 22.0.

Resultados: De un total de 1.364 pacientes, se estimó una prevalencia de enfermedad de 0,15%, con edad promedio 53,2 ± 13,9 años y de inicio de síntomas 41,3 ± 14,0 años. El 81,9% fue de sexo femenino. La media de DAS-28 fue 3,46. El 12,9% de pacientes era fumador. La osteoporosis (32,3% de pacientes) e hipertensión arterial (32,1%) fueron las comorbilidades más frecuentes y metotrexate (98.4%) el medicamento más prescrito.

Conclusiones: Es el primer estudio en Colombia que utiliza una cohorte amplia y aporta información válida que establece las características clínicas, comportamiento de la enfermedad, comorbilidades y tendencias de la medicación en el país.

Introduction

Rheumatoid arthritis (RA) is a chronic disease characterized by inflammation, pain, the destruction of synovial joints and systemic manifestations including cardiovascular, lung, bone and psychological involvements which lead to severe disability and premature mortality.[1–4] It is considered an autoimmune disease because of the presence of autoantibodies such as rheumatoid factor (RF) and anti-citrullinated peptides (ACPA) or (cyclic citrullinated peptide [anti-CCPs] antibodies) that may be found and precede clinical manifestations of the disease by several years.[1] The prevalence for RA is estimated at 0.8–1.0% across the general population, affecting 2–4 times more women than men. Its prevalence increases with age and gender differences decrease.[3–7] It is estimated that the incidence in the United States is at 25 per 100,000 men and 54 per 100,000 women, which means that about 2.1 million people have the disease. Most European and North American studies estimate an average annual incidence of 0.02–0.05%.[8] The age of onset is usually between 30 and 50 years old and this is related to the interaction of environmental agents and the person's individual genetic predisposition.[3,4,6,7] Juvenile RA and the elderly-onset RA (older than 65 years old) may also occur.[7]

In Colombia little available data exists that characterizes RA and variables related to its clinical behavior. The study attempted to determine socio-demographics, clinical, paraclinical and pharmacological variables in a cohort of patients diagnosed with RA in five cities.

Materials and methods

Taking as a base a population of 858,045 patients from the contributory scheme of the Health System of Colombia (SGSSS),

Health Assurance Company (EPS) affiliates was selected from all ages and both genders with a diagnostic in medical record that included the words "rheumatoid arthritis." This was carried out in five of Colombia's main cities (Bogotá, Cali, Manizales, Medellin, and Pereira) in patients who had been treated at the Service Providing Institution in the application of medications (IPS-Especializada de Audifarma S.A.) between December 2009 and August 2013. Diagnoses according to the International Classification of Diseases (ICD-10), were: (1) Rheumatoid arthritis, unspecified (M069). (2) Arthritis, unspecified (M159). (3) Seropositive rheumatoid arthritis, not otherwise specified (M059). (4) Juvenile arthritis, unspecified (M080). (5) Seronegative rheumatoid arthritis (M060). (6) Juvenile rheumatoid arthritis (M080). (7) Other seropositive rheumatoid arthritis (M058) and (8) Other specified rheumatoid arthritis (M068). All diagnoses were made by physician who specializes in rheumatology.

Information was obtained by a team of four physicians trained for this purpose and the data was reviewed and audited by a pharmacoepidemiologist who recorded them in an Excel database for initial analysis. The following variables were considered: socio-demographic: age, gender, educational level. Clinical: specific diagnosis according to the ICD-10, age of the onset of symptoms, age at moment of diagnosis, progression time of the disease, DAS-28 mean, comorbidities. Pharmacological: the international non-proprietary name (generic) of disease-modifying antirheumatic drug (DMARDs) which were being received. Behavioral factors were also described such as those who were smokers and the active consumption of alcohol (yes/no).

Information from the Excel® database was analyzed using IBM-SPSS 22.0 software for Windows (IBM Chicago Illinois, USA). Data was expressed in frequencies and percentages.