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# Reumatología Clínica

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## Editorial

### Osteoarthritis. Your turn<sup>☆</sup>

### Artrosis. Su turno

Montserrat Romera Baures

Servicio de Reumatología, Hospital Universitari de Bellvitge, l'Hospitalet de Llobregat, Barcelona, Spain



Although osteoarthritis (OA) is the most widespread rheumatic disease, with an estimated prevalence, according to the EPISER study, of 10% in Spain, its etiology is generally unknown. In contrast to other rheumatic diseases considered to be “more serious”, because of their effect on vital organs or the rapid development of joint destruction, it has, in many cases, been largely forgotten. Osteoarthritis is known to have a great impact on quality of life, on patient productivity and on the costs of the disease. It has been suggested that it will be the fourth major cause of disability by 2020, and is among the 25 foremost causes having the greatest impact on health according to the global burden of disease.<sup>1</sup>

There is a great variability in the utilization of different drugs for the treatment of the symptoms of OA. In a population-based study conducted in Catalonia, in northeastern Spain, with 238,536 participants, the drugs most frequently administered were chondroitin sulfate (21.2%), glucosamine (15.8%) and oral anti-inflammatory drugs (14.4%).<sup>2</sup> The researchers detected an increase in the incidence of the use of opioids and of cyclooxygenase 2 (COX-2) inhibitors during the study period (2006–2010). The authors conclude that the combination of different drugs is very common in the treatment of OA patients, and they alert us about the risk of possible drug interactions that can have a potential impact on safety, as well as an increase in the costs of the disease. The utilization of some of these agents may also have an effect on an increase in cardiovascular episodes in an OA population in which there is very probably a cardiovascular risk profile.

Osteoarthritis was initially considered a single disease, but recent findings on its pathogenesis indicate that it is a condition with a phenotypic variety that includes metabolic, age-related, inflammatory and hormonal disorders, as well as the existence of previous lesions, among other causes. In some cases, there is a clear phenotype, but, on other occasions, the phenotypes overlap. Although OA is described as a noninflammatory disease, there is data in the literature that show that inflammation may contribute to the symptoms and to the progression of this condition.<sup>3</sup> In OA there can be molecular anomalies or defined radiographic features much before the development of the clinical symptoms, that can take years or even decades before they are noted; it could

be defined as an asymptomatic state of the disease. Both epidemiological and biological studies support the concept of metabolic OA, which, regardless of obesity or other known risk factors, links several components of metabolic syndrome such as hypertension and type 2 diabetes. An increase in the rate of mortality—mainly from cardiovascular causes—has been reported in OA patients.<sup>4,5</sup> Genetic factors that have been associated with a greater severity of the progression of the disease have also been identified.<sup>6</sup>

Owing to the heterogeneity of OA, the Osteoarthritis Research Society International (OARSI) recommends stimulating the use of a standard nomenclature for its definition, which would serve as a basis to describe OA and be able to define the different phenotypes. One of the great challenges in research on OA is the lack of tools designed for detecting the disease at an early stage, identifying the risks of having this condition and predicting its progression. According to the OARSI, it would be important to establish tools analogous to the FRAX—developed to predict the risk of fracture in osteoporosis—to identify the disease at an early stage in its first preradiographic and/or molecular stages. Agreement on sensitive and specific diagnostic criteria would help in the development of disease-modifying therapies for this disorder that have proved to be so recalcitrant to date.<sup>7</sup>

Following these recommendations and to facilitate the undertaking of research projects, the Spanish Society of Rheumatology (SER) has constituted the ARTROSER Working Group, whose main interest will be the study of this condition, which is highly prevalent in Spain. Its aim is to cover all of the forms in which the disease is expressed and the possible factors that can influence the health and quality of life of patients with OA, to subsequently work in its prevention and possible treatments.

The major objective of the working groups of the SER is to make advances in our scientific understanding. They have been created so that all the interested members can collaborate in a specific aspect of rheumatology.

One of the first initiatives proposed by ARTROSER was to coordinate a roundtable at the next congress of the Spanish Society of Rheumatology to be held in Bilbao. There, we will approach the subject of metabolic OA, the relationship to the Mediterranean diet and inflammation as a model for the prevention and treatment of OA, and suggest as an objective the design of a Spanish cohort for the study of this disease.

Osteoarthritis is a prevalent and disabling condition that involves an organ—the joint—and leads to the outcome of joint

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E-mail address: [m.romera@bellvitgehospital.cat](mailto:m.romera@bellvitgehospital.cat)

failure. Early detection of OA, as well as the characterization of the different phenotypes, are crucial elements for understanding the process of this disorder and will help us to identify new treatments that will be effective both in the treatment of the symptoms and in modifying the course of the disease.

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