SPARTAN annual meeting, New York City 2014

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The annual meeting of SPARTAN (Spondyloarthritis Research and Treatment Network) was held in New York City on July 11 and 12, 2014. SPARTAN is a network of health care professionals in North America dedicated to foster research, education, awareness, and therapy of spondyloarthritis. This group of arthritides is highly prevalent in the general population, especially in younger individuals in whom it constitutes a frequent cause of long-standing lower back pain leading to significant impact in quality of life, functional impairment, and disability. In addition, despite considerable investigation in the past several years, the exact pathogenic pathways remain to be elucidated.

This issue of Clinical Rheumatology highlights six papers presented at the annual meeting. It was an intense two-day affair devoted to basic, clinical, and therapeutic discussion concerning spondyloarthritis by a group of experts.

The opening article by Danve and Deodhar discussed different strategies for screening and referral for axial spondyloarthritis. Danve and Deodhar emphasized the fact that despite its high prevalence, this group of inflammatory disorders is often unrecognized or misdiagnosed in the general population. They describe several strategies that have been developed, which have included patients with chronic back pain for longer than 3 months with age of onset of less than 45 years and one or more typical spondyloarthritis features with high sensitivity and specificity. Consistent application of any strategy by clinicians dealing with these disorders should result in appropriate referral to rheumatologists, which will allow prompt diagnosis and management.

The next article by Gensler discusses the cardiovascular clinical manifestations described in patients with spondyloarthritis, especially in well-established ankylosing spondylitis (AS). Emphasis is placed on structural vascular

involvement such as aortitis and aortic insufficiency as described in older literature in patients with AS, with little published data in non-radiographic disease or the general axial spondyloarthritis (AxSpA). Gensler concludes that in spondyloarthritis, cardiovascular disease is represented by cardiovascular events and risk factors, structural abnormalities, and conduction disease. There is a need, however, to define the role, if any, of TNFi therapy in the prevention of these complications in this population of patients.

Uveitis, the most common extra-articular manifestation of spondyloarthritis, particularly AS, is discussed next. Rosenbaum describes its clinical characteristics in the different members of the group with especial emphasis on AS. A brief review of a pertinent animal model of uveitis and arthritis is also performed as well as therapeutic modalities including the use of TNF inhibitors.

Next, Haroon reviews the important topic of ankylosis in AS. New bone formation is a characteristic feature of AS, and its pathogenesis remains an enigma. Whether bone formation and inflammation are related or not is the key issue that needs to be defined. Older and more recent developments are presented in a coherent and lucid manner. Genetic and animal models data have been extensively discussed, and the potential role of NSAIDs and TNFi in the prevention of this complication is also presented.

The next article of this symposium by Reveille deals with potential biomarkers that can be used for diagnosis, monitoring of disease activity, and progression and treatment responses in AS and AxSpA. This is an important topic and of great interest for these highly prevalent disorders, especially for AS in which there is a considerable delay of several years before the diagnosis can be firmly established. AxSpA can progress to AS in a large proportion of affected individuals, and it may take up to 10 years before sacroiliitis can be detected by conventional radiography. With the availability of newer and more effective therapies, it is imperative to establish an early diagnosis and therapeutic management in order to prevent structural joint damage including bony fusion. A comprehensive review on the potential role of genetic,

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immunologic, cytokine, and growth factors that may be useful to diagnose, assess disease activity, and progression follows. It should be of great interest to expand the study of the potential contribution of microbes and the microbiota in the pathogenesis of spondyloarthritis and elucidate their role in diagnosis, prevention, and therapy [1, 2].

The last contribution by Raychaudhuri et al. discusses the role of IL-17 in the pathogenesis of psoriatic arthritis (PsA) and AxSpA. Evidence is presented from both animal models and humans that Th17 cytokines (IL-17 and IL-22) play a role in bone erosion, osteitis, and new bone formation, the hall mark of skeletal involvement in AS. They also present data from their own laboratory supporting a role of Th17 cells in the pathogenesis of psoriasis and PsA.

In summary, it is hoped that the presentation of this vital information will aid the reader in obtaining an up-to-date, in-depth understanding and appreciation for this interesting group of disorders.

References

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