Early Psoriatic Arthritis

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ABSTRACT. Early detection of psoriatic arthritis (PsA) can effectively help in reducing the risk of joint damage and disability. Accordingly, the authors offer diagnostic insights in order to improve the approach to the patient's medical history, clinical examination, and the imaging modalities. Early PsA is a condition with a consistent risk of clinical progression. Marked entheseal involvement is a distinctive clinical aspect that helps discriminate early PsA from other conditions observed at their onset, in particular rheumatoid arthritis. (J Rheumatol 2009;36 Suppl 83:26-27; doi:10.3899/jrheum.090217)

Key Indexing Terms:
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At the end of the last century, clinical studies on patients with rheumatoid arthritis (RA), conducted with new imaging modalities, increased our ability to recognize soft tissue swelling and erosions that were too small to be seen on traditional plain radiographs[1,2]. This evidence confirmed that RA is an aggressive condition and supported the concept that the degree of inflammation correlates with structural damage, which is irreversible over time. Consequently, the rapid recognition of inflammatory arthritides became a crucial medical subject and the concept of "early arthritis" was developed to assure rapid referral to rheumatologists of all patients with articular involvement of recent onset[3].

COMPARISON OF EARLY RHEUMATOID AND EARLY PSORIATIC ARTHRITIS

In recent years, a large body of evidence has demonstrated that psoriatic arthritis (PsA), as with RA, is a severe disease that produces progressive and irreversible joint damage[4,5]. Stable radiographic changes are detectable within 2 years of clinical onset[6]. Therefore, its recognition at early clinical stages is crucial to prevent progression of articular damage. Unfortunately, this point raises several difficulties, the most important of which is that, using a traditional clinical approach, the real severity of joint inflammation may be underestimated. Compared with RA patients, those with PsA show an articular and nonarticular tenderness that is significantly reduced, with a threshold of tenderness that is significantly increased[7]. Despite treatment with a traditional disease modifying antirheumatic drug (DMARD), the clinical pattern of the condition worsens over time[8]. Indeed, more than 60% of patients who start with monooligoarthritis develop polyarthritis during followup[8]. In addition, although patients with polyarthritis are more frequently treated with traditional DMARD, the number of their involved joints is a function of disease duration[8]. Therefore, there is a consistent rationale towards early effective treatment of PsA patients in order to avoid joint damage.

HOW CAN WE DETECT PsA EARLIER?

The diagnosis of early PsA requires extremely careful attention to recognition of skin and joint involvement. We know that skin involvement can be clinically more or less evident. Apart from the case of patients with overt skin and/or nail psoriasis or those in whom disease has been present in their medical history, we have to consider patients with barely evident cutaneous involvement (minimal lesions) and those with preclinical evidence (skin xerosis). Moreover, we need to emphasize the usefulness of magnetic resonance imaging in classifying the disease by demonstrating nail abnormalities in psoriatic patients even in the absence of overt onycopathy[9]. Finally, we also have to consider the case of patients in whom classic skin disease is present only in the family medical history. Emphasized by the ClASsification of Psoriatic ARthritis (CASPAR) criteria[10], the latter clinical category supports the so-called subset of PsA *sine* psoriasis, which we previously detailed[11].

With regards to joint evaluation, today, traditional physical examination can no longer be considered an exhaustive system for complete detection of articular involvement. Indeed, detection of synovitis and particularly enthesitis by physical examination, apart from having suboptimal reproducibility, has a low sensitivity. Recent evidence shows that sonography detects more synovitis than clinical examination in patients with oligoarthritis[12]. Moreover, in almost two-thirds of patients screened, subclinical disease was demonstrated and, in one third, oligoarthritis was reclassified as polyarthritis. More recently, entheseal abnormalities were

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demonstrated by ultrasonography in psoriatic patients clinically asymptomatic for rheumatic complaints[13]. We studied 47 patients with PsA with articular and/or the entheseal involvement of less than 12 weeks' duration[14]. Twenty-nine patients were classified as the established subset based on the Moll and Wright criteria, while the remaining 18 were classified as *sine* psoriasis. We studied these patients with a protocol that included clinical examination, then total body scintiscan examination of the skeleton, and finally B mode ultrasonography of articular and/or entheseal sites that showed increased uptake of the tracer. At clinical examination three-quarters of the patients had an oligo-enthesoarthritis. Total body scintigraphy revealed a more extensive articular and entheseal involvement than was clinically apparent. Moreover, B-mode ultrasonography confirmed in all active scintigraphic sites a gray scale indicating changes of synovial and/or entheseal involvement. On the basis of this result early PsA can be considered a clinically underestimated disease, and this has a significant influence on the clinical decision process.

WHICH THERAPEUTIC STRATEGIES FOR THE FUTURE?

The challenge of early diagnosis in rheumatology today has reached a crucial stage[15]. The emerging profile of early PsA shows a condition with a consistent risk of clinical progression over time. The marked entheseal involvement rapidly helps to discriminate it from other conditions, particularly in the case of early RA. Today its detection, followed by a rapid therapeutic intervention, could assure an optimal clinical outcome. The introduction of new therapeutic agents that act by blocking tumor necrosis factor or by modulating activated T cells has opened new horizons for patients and rheumatologists. Now, we need controlled clinical trials to support the usefulness of these new agents in early stages of PsA.

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