Recognizing psoriatic arthritis in the dermatology clinic

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Dermatologists care for patients with psoriasis in whom there exists an inherent risk of psoriatic arthritis, a condition with potential for causing joint damage and subsequent disability. Most patients have psoriasis for years before the development of psoriatic arthritis, and there may be a significant proportion of psoriasis patients with joint involvement that are cared for by the dermatologist. With the absence of a diagnostic measure, the criterion standard for recognizing or monitoring psoriatic arthritis remains the clinical assessment. Recognition of psoriatic arthritis in the psoriasis patient—and the dermatologist's ability to differentiate it from other types of arthritis—provide an opportunity to improve patient outcomes through early recognition and facilitation of intervention in collaboration with a rheumatologist. (J Am Acad Dermatol 2010;63:733-48.)

Learning objectives: After completing this learning activity, participants should be able to recognize the presence of psoriatic arthritis among patients with psoriasis; distinguish psoriatic arthritis from reactive arthritis, osteoarthritis, gout, rheumatoid arthritis, and ankylosing spondylitis; and use appropriate laboratory and imaging tests in the evaluation of patients with psoriasis and musculoskeletal complaints.

Key words: dermatologist; psoriatic arthritis; screening.

Dermatologists care for patients with psoriasis in whom there exists an inherent risk of coupled morbidity, the most common and well described of which is psoriatic arthritis (PsA). PsA may be defined as an inflammatory arthritis which is seronegative for rheumatoid factor (RF) and enthesitis that is associated with psoriasis.[1] It has been classified among the four main spondyloarthropathies which, in addition to inflammatory arthritis, share a spectrum of components including enthesitis and dactylitis, axial involvement, RF seronegativity, presence of the human leukocyte antigen (HLA)*B27 allele and extraarticular features.[2]

Once described as a disease with a more mild prognosis,[3,4] PsA is now understood to have potential for joint damage with disability outcomes similar to patients with rheumatoid arthritis (RA).[5-8] Up to 57% of PsA patients have erosive arthropathy,[5,9] and functional disability occurs in 11% to 19% of patients.[5,9-11] PsA patients also have increased mortality relative to the general population.[12] Most patients have psoriasis either for several years before the development of arthritis or simultaneously with it.[5] As such, a significant proportion of psoriasis patients have joint involvement without a diagnosis of PsA,[13] and it is likely that many of these patients are under the care of dermatologists. Accordingly, the recognition of PsA in the psoriasis patient by the dermatologist provides an opportunity to improve outcomes through early recognition and facilitation of intervention in collaboration with a rheumatologist.

The unpredictable, heterogeneous, and often insidious involvement of joints or juxtaarticular tendons and ligaments can make clinical recognition of PsA and distinction from other types of arthritis a challenge. Types of arthritis such as osteoarthritis (OA) and gout often coexist with psoriasis and mimic presentations of PsA. Alternatively, patients with psoriasis-like eruptions (ie, seborrhea) and concomitant inflammatory arthritis, such as RA or ankylosing

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spondylitis (AS), may be misdiagnosed with PsA. With the absence of a diagnostic measure for PsA, the criterion standard for diagnosis or monitoring remains the clinical assessment. With basic training, it is possible for the dermatologist to recognize the presence of PsA by appreciating disease demographics and clinical features, asking the appropriate questions, performing simple targeted physical assessments, and using the appropriate laboratory and imaging studies. For a comprehensive general overview of the diagnostic and treatment challenges of PsA as they relate to pathogenesis and burden of disease, the reader is referred to the January 2005 continuing medical education article published in the *Journal*.[14] The aim of this review is to provide the dermatologist with a practical framework for recognizing the clinical features of PsA and distinguishing these features from other common forms of arthritis, thereby facilitating more specific and timely referral to rheumatology. PsA is contrasted with reactive arthritis (ReA), OA, gout, RA, and AS.

CAPSULE SUMMARY

- Dermatologists care for psoriasis patients in whom there exists an inherent risk for coupled morbidity, most commonly psoriatic arthritis (PsA).
- Different types of arthritis coexist with psoriasis and mimic presentations of PsA; in addition, patients with psoriasis-like eruptions and concomitant inflammatory arthritis may be misdiagnosed with PsA.
- The dermatologist may recognize the presence of PsA by appreciating disease demographics and clinical features, asking the appropriate questions, performing simple targeted physical assessments, and using the most appropriate laboratory and imaging studies.
- The recognition of PsA in psoriasis patients by the dermatologist provides an opportunity to improve outcomes through early recognition and facilitation of intervention in collaboration with a rheumatologist.

PSORIATIC ARTHRITIS

Key points

- **Psoriatic arthritis (PsA) is a common condition in which psoriasis precedes arthritis by years in most patients**
- **As an inflammatory arthritis, PsA is characterized by joint discomfort, swelling, and prolonged morning stiffness**
- **Patterns of joint involvement in PsA are variable, and relying on patterns of involvement alone to distinguish PsA from other forms of arthritis may be a pitfall**
- **Most common sites of entheseal involvement in PsA include the attachment of the Achilles tendon or the plantar fascia to the calcaneus**
- **A visual inspection and targeted examination of the joints and entheses may facilitate recognition of PsA with greater sensitivity than through patient-reported symptoms alone**
- **There are no laboratory tests that specify a diagnosis of PsA**
- **The presence of marginal and central erosions, periostitis, and bulky syndesmophytes on plain radiographic film distinguish PsA from other forms of arthritis**

Epidemiology

PsA has a worldwide prevalence among psoriasis patients ranging from 6% to 42%.[15-23] Population heterogeneity and varying methods of disease classification and data acquisition contribute to the difficulty in establishing its true prevalence. Although the incidence of PsA among patients with psoriasis varies among epidemiologic studies, it is apparent that it is a common disorder.[15-20] As a rough estimate, if one-third of the 1% to 3% of the US population with psoriasis has PsA, then PsA may occur in 0.3% to 1.0% of this group, a prevalence similar to that seen in RA. In 70% of PsA patients, psoriasis precedes the onset of arthritis by about 10 years,[5] and the likelihood of developing PsA may also correlate with duration and severity of psoriasis.[16] The simultaneous onset of psoriasis and arthritis is noted in approximately 10% to 15% of cases,[5] and arthritis may precede psoriasis by as many as 10 to 15 years in the remaining 15% of cases. In children, however, arthritis may precede psoriasis in as many as 50% of cases.[24-26] PsA affects men and women equally, with a peak age of onset between 35 and 45 years of age. In children, PsA has a mean age of onset of 9 to 10 years, and may have a female predominance.

With these epidemiologic considerations in mind, one may begin to classify patients among the various types of arthritis. For example, a 30-year-old man with psoriasis and pain of the distal interphalangeal (DIP) joint is more likely to have PsA than OA (see the section on osteoarthritis). Similarly, a 35-year-old man with psoriasis and diffuse swelling of the big toe is more likely to have PsA than gout (see the section on gout).