

# Psoriatic Arthritis Screening and Evaluation (PASE) Questionnaire and the Role of Dermatologists: A Report from the GRAPPA 2009 Annual Meeting

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**ABSTRACT.** Psoriatic arthritis (PsA) is an inflammatory arthritis associated with psoriasis, often with a variable course that ranges from slowly progressive to rapidly destructive. Delay in diagnosis and treatment may lead to an irreversible erosive arthropathy, leading further to physical disability and deformity. The Psoriatic Arthritis Screening and Evaluation (PASE) tool was developed and validated to help dermatologists screen more effectively for PsA; recently, it has been undergoing further validation. An update on the continuing experience with the PASE questionnaire, along with a discussion of why dermatologists have a critical role in screening for PsA, was a major focus of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) annual meeting at Stockholm, Sweden, in June 2009. (J Rheumatol 2011;38:548–50; doi:10.3899/jrheum.101118)

## Key Indexing Terms:

PSORITIC ARTHRITIS

PSORIASIS

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During the GRAPPA (Group for Research and Assessment of Psoriasis and Psoriatic Arthritis) annual meeting at Stockholm, Sweden, in June 2009, screening for psoriatic arthritis (PsA) among patients with psoriasis was discussed, along with a description of the Psoriatic Arthritis Screening and Evaluation (PASE) questionnaire.

GRAPPA has led an effort to develop and validate PsA screening tools for use in clinical practice<sup>1</sup>. Although a single screening tool may not be effective for all patient populations, there is a need to better define the role of screening tools in the outpatient dermatology office, with the overall goal of identifying PsA patients early in the disease course. This important unmet need has fostered the development of screening tools for PsA. Philip Mease (Rheumatology Associates, Seattle, WA, USA) introduced the topic, followed by Vinod Chandran (Division of Rheumatology, University of Toronto, Toronto, Canada) who discussed current screening methods. Abrar Qureshi (Department of Dermatology, Brigham and Women's

Hospital, Harvard Medical School, Boston, MA, USA) then moderated an open discussion on PsA screening tools.

## Summary of the PASE Tool

The PASE questionnaire was developed and validated at the Center for Skin and Related Musculoskeletal Diseases Clinic, a combined dermatology-rheumatology clinic at Brigham and Women's Hospital in Boston. The PASE was designed to help dermatologists identify individuals with psoriasis who would benefit from a prompt referral to rheumatology; it was not meant to be used as a diagnostic tool or as a substitute for a thorough rheumatologic examination. The PASE consists of 15 questions divided into 2 subscales, 7 questions that assess symptoms and 8 questions that assess function. Questions are scored on a numeric scale (range 1–5, with a total possible score of 75); those individuals who are more likely to have PsA will score higher than individuals without PsA. Results of pilot-testing in 71 individuals were analyzed to validate this concept: scores of individuals without PsA [including those with osteoarthritis (OA)] were significantly lower than scores of those with PsA (without OA). Further, the PASE was able to distinguish severe PsA subtypes (mutilans) from less severe subtypes. A total score cutoff of 47 was able to detect PsA with 82% sensitivity and 73% specificity<sup>2</sup>.

A second validation study<sup>3</sup> in a larger sample size (n = 190) showed that the PASE was able to detect PsA with 76% sensitivity and 76% specificity at a total score cutoff of 44. Because the first study showed that PASE scores may be low in individuals with no active symptoms, a subanalysis was done in the second study: scores were excluded from 10 participants whose PsA was either quiescent or asymptomatic (based on rheumatologic evaluation) in order to deter-

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mine the sensitivity and specificity of the PASE tool among those only with active symptoms. In these remaining 180 individuals, PsA was detected with 93% sensitivity and 80% specificity at a total score cutoff of 47. The PASE also demonstrated significant test-retest reliability and sensitivity to change after systemic therapy in this second validation study<sup>3</sup>.

### **Summary of Challenges Dermatologists Face in Addressing Psoriatic Patients with Musculoskeletal Complaints**

Dr. Qureshi led a lively discussion that addressed the unmet needs of the dermatology community in the area of PsA and the challenges dermatologists face when screening, evaluating, and diagnosing a patient with PsA in day-to-day practice. He asked whether dermatologists should screen for inflammatory arthritis; if so, then by what methods and frequency should screening occur? For example, screening methods may include a questionnaire, history, physical examination, imaging, or a combination of methods. Screening may be done at every visit, monthly, or yearly. Initial screening may include evaluation for signs of inflammatory arthritis. Data from the INSPIRE study (International Spondyloarthritis Interobserver Reliability Exercise) suggest that dermatologists may not recognize dactylitis or enthesitis as well as rheumatologists<sup>4</sup>; however, dermatologists may be able to do so if they were properly trained. Another important question was raised: whether an average community dermatologist would be willing to learn how to evaluate for signs of inflammatory arthritis. In addition to the physical examination, various imaging modalities can identify sequelae of inflammatory joint disease. However, the timing and modality used can affect the sensitivity and specificity of imaging techniques in making a PsA diagnosis. Dermatologists do not order radiographs as routinely as rheumatologists, making it difficult to incorporate imaging into routine dermatology practice. One option would be for a nurse or physician assistant to perform initial screening using a questionnaire and present the screening results to the dermatologist. The dermatologist could then ask more focused questions and decide whether a referral to a rheumatologist is warranted.

Dermatologists who screen and/or evaluate for inflammatory arthritis are faced with decisions regarding followup care, further imaging, and aggressive treatment. They may choose to manage inflammatory arthritis by themselves, by collaborative consultation with a rheumatologist, or by complete referral to a rheumatologist. Even when consultation with rheumatology is available, it may remain difficult to establish a diagnosis in psoriasis patients presenting with musculoskeletal complaints. In a study at the combined dermatology-rheumatology clinic at Brigham and Women's Hospital, 88 psoriatic individuals presented with musculoskeletal pain; data showed that 41% had PsA, 27% had

OA, 15% had PsA and OA, 2% had gout, 1% had PsA and gout, 1% had OA and gout, and 13% had undifferentiated arthritis<sup>5</sup>. Of those with PsA alone, 11% were reported to have enthesitis. These data indicate that psoriatic individuals with musculoskeletal pain may not always have inflammatory arthritis. Currently, no clear guidelines exist to direct dermatologists in screening, evaluating, and managing psoriatic individuals who present with musculoskeletal complaints and possible inflammatory arthritis.

### **“What Dermatologists Need” Questionnaire**

To elicit feedback from GRAPPA members regarding the dermatologist's role in screening, evaluating, and managing PsA, Dr. Qureshi administered a 6-item survey. The first 2 questions solicited members' specialty and place of work. Of 47 GRAPPA members who completed the survey, 13 (28%) were dermatologists, 29 (62%) were rheumatologists, 3 (6%) were both a dermatologist and rheumatologist, and 2 (4%) were nonphysician researchers. Responses to the remaining questions are provided in Table 1. The clear majority of respondents (95.7%) either agreed or strongly agreed that dermatologists should screen psoriasis patients for PsA and that a dermatologist should use a questionnaire for PsA screening (83%). One respondent indicated that dermatologists should only screen and not evaluate for PsA. Regarding frequency of screening, 91.5% of responders either agreed or strongly agreed that screening should take place at least once in 12 months. One respondent wrote “6 months would be better,” and another, “when patients refer symptoms or once a year”. Regarding referring patients with possible PsA to rheumatology for further management, 78.7% of respondents either agreed or strongly agreed; 19.2% were neutral on this issue.

During further discussions, one participant suggested that dermatologists must absolutely inquire about arthritic involvement given that psoriasis is a multisystem disease in one-fourth of patients with psoriasis. The American Academy of Dermatology has published guidelines<sup>6</sup> that state that all dermatologists who treat psoriasis patients must inquire about PsA; however, political and economic disincentives in the US may dissuade dermatologists from doing this. In a capitation system a fixed amount of payment is allowed for a patient per year across all specialties. In such a setting, a primary care physician may be reluctant to refer patients to specialists who may write a prescription for expensive drug X (i.e., a biologic agent), which places the primary care physician at risk for exceeding the fixed payment. Effective lobbying may be necessary to “convince those who pay the bills” that systemic or biologic treatment for arthritic involvement is indeed “worth paying for.” Another participant described the unfortunate attitude among some dermatologists that the joints “aren't our problem,” indicating that additional education is needed within the dermatology community. Members were reminded that

Table 1. GRAPPA members' (n = 47) responses to the "What Dermatologists Need" questionnaire administered at the 2009 annual meeting.

Question	Strongly Agree, n (%)	Agree, n (%)	Neutral, n (%)	Disagree, n (%)	Strongly Disagree, n (%)	Other/No Response, n (%)
3. Dermatologists should "screen" psoriasis patients for psoriatic arthritis (PsA)	29 (61.7)	16 (34)	1 (2.1)	0 (0)	1 (2.1)	0 (0)
4. Dermatologists should use a questionnaire to screen/evaluate psoriasis patients for PsA	21 (44.7)	8 (38.3)	6 (12.8)	1 (2.1)	0 (0)	1 (2.1)
5. Dermatologists should screen/evaluate psoriasis patients for PsA AT LEAST ONCE IN 12 MONTHS	22 (46.8)	21 (44.7)	2 (4.3)	1 (2.1)	0 (0)	1 (2.1)
6. Once screened/evaluated, dermatologists should refer psoriasis patients with possible PsA to rheumatologists for further management.	22 (46.8)	15 (31.9)	9 (19.2)	1 (2.1)	0 (0)	0 (0)

many dermatologists do not prescribe systemic therapy when there is a clear indication for its use, underscoring the importance of using a self-administered questionnaire to identify those who might have PsA so that they could be promptly referred to a provider who does prescribe systemic therapy. Even with a questionnaire, the dermatologist must also ask about symptoms of PsA because a questionnaire may not reflect all symptoms. An important next step would be to determine the questions that could identify most symptoms.

Some distinctions were drawn between "weighted" comanagement versus transferring management to a rheumatologist, which is similar to what Ruderman and Gordon propose in their 4-quadrant model<sup>7</sup>. For example, if a patient with PsA had predominately severe skin disease, the dermatologist could become the primary provider with rheumatology collaboration; however, this strategy would likely be influenced by the dermatologist's expertise with systemic therapy. Transferring management to rheumatology may be an option when the joints become the predominant issue, especially in the context of a busy dermatology clinic where ordering and reviewing a radiograph or magnetic resonance image may be impractical.

## Conclusion

In summary, GRAPPA members who attended the 2009 annual meeting collectively agreed that screening for PsA should take place in dermatology offices, with consensus that a questionnaire should be used at least yearly. They also

agreed that dermatologists should refer possible cases of PsA to rheumatology for further management. The PASE questionnaire was presented as a validated tool that dermatologists could use to help them screen more effectively and for more efficient referral to rheumatology.

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