

# GRAPPA 2013 Basic/Translational/Clinical Science Update: Comorbidity Monitoring

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**ABSTRACT.** It is now well established that psoriatic disease is associated with increased cardiovascular (CV) risk. Screening guidelines and expert recommendations for CV risk factors have been published, but these are primarily directed to specific specialists (e.g., cardiologists or diabetologists) and may not be well known in common practice. The Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) and other organizations are interested in adapting current comorbidity screening guidelines for use by dermatologists and rheumatologists. The resulting checklists and algorithms will need to be evaluated for practicability and performance. (J Rheumatol 2014;41:1224–6; doi:10.3899/jrheum.140175)

*Key Indexing Terms:*

PSORIASIS

COMORBIDITIES

MORTALITY

MYOCARDIAL INFARCTION

SCREENING

CARDIOVASCULAR RISK

Diseases occurring more often than expected in association with psoriasis (PsO) and/or psoriatic arthritis (PsA) have been reported for several decades, but the importance of these comorbidities to the management of PsO and PsA has only recently been recognized<sup>1</sup>. Comorbidities observed in 1 or both diseases are listed in Table 1<sup>2,3,4</sup>. Although all these comorbidities represent important pathologies in their own right, malignancy and cardiovascular (CV) risk factors have been observed in association with both PsO and PsA patients. CV risk factors are particularly important, however, because they contribute most to the increased mortality of patients with severe PsO<sup>5</sup>. Indeed, severe PsO may be an independent CV risk factor<sup>6</sup>, as may be the case with severe PsA<sup>7</sup>. Therefore, the focus of this article will be on CV comorbidities.

Multiple societies have published recommendations to screen for conventional CV risk factors. It may be difficult for dermatologists or rheumatologists to keep track of all of these recommendations during their daily practice with PsO or PsA patients. Because no explicit recommendations have been issued, experts have proposed simple-to-use checklists. One such widely accepted checklist has been published by the National Psoriasis Foundation (NPF)<sup>8</sup>. Slight changes to the NPF checklist have been suggested by others to align the monitoring to current guidelines from other specialties, e.g., diabetology (Table 2)<sup>9</sup>. This approach has also been incorporated into an algorithm on the comprehensive management of patients with PsO suggested by the Spanish Working Group on Comorbidity in Psoriasis<sup>2</sup>.

CV risk factors are important and must be treated in their own right. The question of whether PsO and PsA each also represent independent CV risk factors is of particular importance and has consequences for the management of the comorbidities. If PsO and PsA are not regarded as risk factors, their presence would not affect the management of factors such as hypertension or dyslipidemia. However, if they are regarded as risk factors, the respective treatment goals must be adapted accordingly, because these goals depend on the number of risk factors present in any given patient.

Important comorbidities other than CV risk factors and diseases must also be considered in patients with PsO/PsA. Despite a lack of comprehensive recommendations, existing guidelines on the treatment of psoriasis do contain useful information on how to screen for these. For example, the German S3 guideline (the first high-quality evidence-based guideline covering conventional and systemic therapies) contains tables on how and when to screen for such comorbidities when initiating or maintaining systemic therapies<sup>10</sup>. In the case of biologics, this includes the search for acute infections and tuberculosis, as well as human immunodeficiency virus and hepatitis screening tests in case of a suggestive history. The recommended monitoring further allows detection of hematologic and liver diseases. Depending on the drug in question, additional comorbidities (e.g., kidney disease) must be monitored as a consequence of the respective drugs' contraindications and profile of adverse events. These tests have also been incorporated into the comprehensive Spanish Working Group algorithm<sup>2</sup>.

It is now widely accepted that dermatologists should screen for PsA among their patients with PsO. A related but less vigorously discussed question is whether dermatologists should also monitor their patients with PsO for other comorbidities, and if so, to what extent and by what means?

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Table 1. Important comorbidities of psoriasis (PsO) and psoriatic arthritis (PsA).

Comorbidities Common in PsO and PsA	Comorbidities	
	Other Comorbidities in PsO	Other Comorbidities in PsA
Cardiovascular disease or risk factors	• PsA	• Osteoporosis
• Obesity	Lifestyle	Infection
• Hypertension	• Tobacco	• Upper respiratory tract
• Dyslipidemia	• Alcohol	• Opportunistic
• Diabetes mellitus	Other	
• Metabolic syndrome	• Nonalcoholic fatty liver disease	
Malignancies	• Inflammatory bowel disease	
• Lymphoma	• Anxiety and depression	

Table 2. Checklists for screening for cardiovascular risk factors<sup>8,9</sup>.

U.S. National Psoriasis Foundation Checklist <sup>8</sup>	Checklist as Modified in Recent Publication <sup>9</sup>
Heart rate	Heart rate
Blood pressure	Blood pressure
Body mass index	Waist circumference
	• Limit: 102 cm (men), 88 cm (women)
Fasting blood lipids	Fasting blood lipids
Fasting blood glucose	Blood glucose
	• Not necessarily fasting

The answer may depend on the particular healthcare system<sup>11</sup>.

After several years of lively discussions and multiple publications, one might think that comorbidities and CV mortality readily come to mind if a physician is caring for a patient with psoriatic disease. However, a publication by Parsi, *et al* suggests that this discussion is largely restricted to dermatologists and rheumatologists, with little influence beyond those specialties<sup>12</sup>. According to that study, only 43% of primary care physicians screen for hypertension among patients with PsO; 27% look for diabetes mellitus, and 11% for dyslipidemia. Cardiologists are 3.5 times more likely to screen for dyslipidemia, even though only 45% of these physicians are aware that PsO is associated with worse CV outcomes. Interestingly, substantially more efforts have been undertaken by these physicians when caring for patients with rheumatoid arthritis or systemic lupus erythematosus<sup>12</sup>. It is important to continue to raise awareness of increased CV risk in patients with psoriatic disease.

GRAPPA members would like to adapt current guidelines for monitoring comorbidities in dermatology and rheumatology practices. In so doing, 3 points are of particular importance:

- Physicians caring for patients with psoriatic disease should define who is in charge and clarify this with each patient. This may depend on the particular healthcare system and the (relative) numbers of specialists and family doctors. It is certainly not obligatory that dermatologists carry the burden of monitoring. On the other hand,

dermatologists or rheumatologists may well be the physicians most often contacted by a patient with psoriatic disease in specialized clinics, and might therefore find themselves in the role of primary care physician.

- Because dermatology practices are often busy, a practical monitoring guideline should be concise. The NPF's checklist or modifications thereof (Table 2) might be good starting points to establish a routine suitable for real-life practice. The comprehensive Spanish algorithm is also attractive, but perhaps best used in specialized clinics.
- Finally, if laboratory abnormalities are observed as a result of monitoring or screening tests, action should be taken to incorporate those results into treatment decisions.

Establishing a network between dermatologists, rheumatologists, and internists of different subspecialties who are interested in following patients with psoriatic disease might be a pragmatic approach to guarantee high-quality, longterm management for patients with psoriatic disease.

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