

More Than Skin Deep

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Dermatologists have traditionally regarded psoriasis as a skin disease. In the past several years, however, a growing body of data has suggested that psoriasis is associated with systemic comorbidities, including metabolic syndrome and increased cardiovascular risk. Metabolic syndrome is generally defined by the presence of, or treatment of, at least 3 of the following 5 criteria: (1) hypertension, (2) insulin resistance, (3) decreased high-density lipoprotein, (4) hypertriglyceridemia, and (5) central obesity. These conditions share common etiologic features and adverse health risks that may directly correlate with the severity of psoriasis.

Individuals with psoriasis or obesity, or both, may similarly manifest insulin resistance, an aberrant lipid profile, and an increased cardiovascular risk.¹ To determine if psoriasis is an independent risk factor for myocardial infarction (MI) when controlling for major cardiovascular risk factors, Gelfand et al² compared outcomes among patients with and without a diagnosis of psoriasis in a prospective, population-based cohort study in the United Kingdom. General practitioners collected data as part of the patients' medical records and stored them in a research database. Patients with psoriasis were classified as severe if they ever received a systemic therapy. A total of 556,995 control patients and patients with mild (n=127,139) and severe psoriasis (n=3837) were identified. The authors found that there were 11,194 MIs (2.0%) within the control population and 2319 (1.8%) and 112 (2.9%) within the mild and severe psoriasis groups, respectively. Patients with psoriasis had an increased adjusted relative risk for MI that varied by age. The authors concluded that psoriasis may confer an independent risk for MI. The relative risk was greatest in young patients with severe psoriasis.²

In a recent review, Sterry et al¹ noted that the pathophysiology of both psoriasis and obesity shows many shared cytokines that are known to contribute to features of metabolic syndrome. A growing body of research

suggests that these diseases may in fact share an etiologic link, which may permit them to join atherosclerosis, autoimmune disease, and other comorbid conditions as facets of a larger systemic disorder of inflammation.

Gelfand et al³ performed a cohort study to determine the risk of mortality in patients with psoriasis. Within the study, the control population was composed of patients with no history of a psoriasis diagnostic code. The main outcome measure was the hazard ratio (HR) of time to death using Cox proportional hazards models adjusted for age and sex. The authors found no overall effect of mild psoriasis on mortality with an HR of 1.0 (95% confidence interval [CI], 0.97-1.02), while patients with severe psoriasis demonstrated an increased overall mortality risk with an HR of 1.5 (95% CI, 1.3-1.7). The authors concluded that severe but not mild psoriasis is associated with an increased risk for death.³

Psoriasis, in both its skin and joint manifestations, represents a major healthcare issue as an indicator of a broader underlying disorder of systemic inflammation; therefore, more comprehensive studies should be conducted to evaluate the pathophysiology, epidemiology, and treatment of psoriasis in relation to comorbid conditions. Given the associations of psoriasis and the risks for systemic diseases, there are many questions to address. Certainly, it is important to assess the impact of systemic medications such as biologics on metabolic syndrome and cardiovascular risks in patients with psoriasis. At this juncture, our most important role is to identify and educate patients with psoriasis who are at risk of systemic complications and ensure appropriate follow-up for their treatment and overall health.

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