

The Clock Is Ticking

Jeffrey M. Weinberg, MD

Over the last decade we have come to understand the nature of psoriasis as a systemic inflammatory condition rather than as simply a skin disease. With this concept, we have continued to identify systemic comorbidities associated with psoriasis, including cardiovascular risk, diabetes mellitus, and metabolic syndrome. As dermatologists, we must serve as the gatekeeper for our patients with psoriasis and help to screen for comorbidities as well as provide appropriate counseling and referral.

Of the potential benefits of novel systemic therapies for psoriasis, the potential for addressing comorbid conditions with these treatments is critically important. Therefore, when I discuss psoriasis treatments, I always review and emphasize the anti-inflammatory effects of these agents. Although we know that psoriasis increases the risk for vascular inflammation and major adverse cardiovascular events (MACEs), it has been unclear if psoriasis duration affects these risks.

Egeberg et al¹ utilized 2 resources to understand the effect of psoriasis duration on vascular disease and cardiovascular events: a human imaging study and a population-based study of cardiovascular disease events. In the first part of the study, patients with psoriasis (N=190) underwent fludeoxyglucose F 18 positron emission tomography/computed tomography. Next, MACE risk was examined using nationwide registries (adjusted hazard ratio in patients with psoriasis [n=87,161] vs the general population [n=4,234,793]). In the imaging study, participants had low cardiovascular risk by traditional risk scores. The authors found that vascular inflammation as demonstrated by the imaging system was significantly associated with disease duration ($\beta=.171$; $P=.002$). In the population-based study, psoriasis duration had a strong relationship with MACE risk (1.0% per additional year of psoriasis duration [hazard ratio, 1.010; 95% confidence interval, 1.007-1.013]). The researchers reported that every standard deviation increase in disease duration increased the target-to-background ratio by 2.5%, which translated into an absolute increase of approximately 10% in future adverse events.¹

Therefore, the authors concluded that there were negative effects of psoriasis duration on vascular inflammation and MACEs,¹ which suggests that the cumulative duration of low-grade chronic inflammation may accelerate vascular disease development and MACEs. The authors therefore noted that providers should consider inquiring about duration of disease to counsel for heightened cardiovascular disease risk in psoriasis patients.¹

We have some evidence that therapeutic intervention may be useful. Wu et al² compared MACE risk in psoriasis patients receiving methotrexate or tumor necrosis factor α (TNF- α) inhibitors. They also assessed the impact of TNF- α inhibitor treatment duration on MACE risk. The authors concluded that psoriasis patients receiving TNF- α inhibitors had a lower MACE risk compared to those receiving methotrexate. Cumulative exposure to TNF- α inhibitors was associated with a reduced risk for MACEs.²

The findings of these studies are poignant and help to further emphasize the importance of proper identification and treatment of psoriasis and its comorbidities. This information also adds an element of urgency to the way we look at this disease and demonstrates that we must intervene as soon as possible in this process.

REFERENCES

1. Egeberg A, Skov L, Joshi AA, et al. The relationship between duration of psoriasis, vascular inflammation, and cardiovascular events [published online August 18, 2017]. *J Am Acad Dermatol*. 2017;77:650.e3-656.e3.
2. Wu JJ, Guerin AD, Sundaram M, et al. Cardiovascular event risk assessment in psoriasis patients treated with tumor necrosis factor- α inhibitors versus methotrexate [published online October 26, 2016]. *J Am Acad Dermatol*. 2017;76:81-90.

RELATED CONTENT ONLINE

The Role of Biologic Therapy for Psoriasis in Cardiovascular Risk Reduction

>> <http://bit.ly/2Cr4314>

From the Icahn School of Medicine at Mount Sinai, New York, New York.

Dr. Weinberg is a speaker for and has received research grants from AbbVie Inc and Amgen Inc.

Correspondence: Jeffrey M. Weinberg, MD, 10 Union Square E, Ste 3C, New York, NY 10003 (jmw27@columbia.edu).