

Under Pressure

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One of the most important elements of a psoriasis patient's medical history is the medication list. We are aware of the possible association between induction or exacerbation of psoriasis and intake of drugs including beta-blockers, calcium channel blockers, angiotensin-converting enzyme inhibitors, lithium, and nonsteroidal anti-inflammatory drugs. However, we are lacking comprehensive data on these putative relationships.

Wu et al¹ evaluated the association of hypertension and antihypertensive medications with risk for psoriasis. The authors pointed out that psoriasis patients have an increased risk for hypertension, and medications for hypertension, especially beta-blockers, have been associated with the development of psoriasis. They noted, however, that there has been no prospective assessment of the association of existing hypertension and antihypertensive medications with risk for incident psoriasis.¹

The authors performed a prospective cohort study (June 1996 to June 1998) of 77,728 women from the Nurses' Health Study who provided biennially updated data on hypertension and antihypertensive medications.¹ They documented 843 incidents of psoriasis during 1,066,339 person-years of follow-up. Women with hypertension tended to be older and had a higher body mass index. In addition, they had proportionately higher prevalence rates of cardiovascular disease, type 2 diabetes mellitus, and hypercholesterolemia. They also were less physically active than subjects without hypertension. Compared with those with normal blood pressure, women with hypertension lasting 6 years or more were at higher risk for development of psoriasis (hazard ratio [HR], 1.27; 95% confidence interval [CI], 1.03-1.57). In stratified analysis,

the risk for psoriasis was higher among hypertensive women without medication use (HR, 1.49; 95% CI, 1.15-1.92) and among hypertensive women with current medication use (HR, 1.31; 95% CI, 1.10-1.55) when compared with those without hypertension and without medication use.¹

Among the individual antihypertensive drugs, only beta-blockers were associated with an increased risk for psoriasis.¹ Of interest, this association persisted in a duration-dependent manner, with a higher risk for psoriasis found among women who regularly used beta-blockers with a duration of use of 6 years or more (HR, 1.39; 95% CI, 1.11-1.73; *P* for trend=.009). No association was found between any other individual hypertension medication and the development of psoriasis.¹

The authors concluded that their study provided evidence that a history of long-term hypertension was associated with an increased risk for psoriasis.¹ Among the individual medications analyzed in the study, only beta-blockers were linked to an increased risk for psoriasis after long-term regular use (≥ 6 years). They noted that these findings provided insights into the relationship between hypertension, medications for the condition, and psoriasis. However, further work is necessary to confirm these findings and clarify the biological mechanisms that may explain these links.¹

As we further evaluate the associations between psoriasis and systemic comorbidities, we are learning more about the complex interrelationship between these conditions. The findings reported by Wu et al¹ serve as another reminder that clinicians should be proactive in having psoriasis patients actively monitor their blood pressure, either with the dermatologist or with the primary care physician. This type of novel prospective information serves as another piece of the puzzle in our comprehensive management of psoriasis.

REFERENCE

1. Wu S, Han J, Li WQ, et al. Hypertension, antihypertensive medication use, and risk of psoriasis [published online ahead of print July 2, 2014]. *JAMA Dermatol*. doi:10.1001/jamadermatol.2013.9957.

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