- Heart, Lung, and Blood Institute. Diagnosis and management of the metabolic syndrome: an American Heart Association/National Heart, Lung, and Blood Institute Scientific Statement. Circulation. 2005;112(17):2735-2752.
- 20. Kurd SK, Gelfand JM. The prevalence of previously diagnosed and undiagnosed psoriasis in US adults: results from NHANES 2003-2004. J Am Acad Dermatol. 2009;60(2):218-224.
- 21. Brandrup F, Green A. The prevalence of psoriasis in Denmark. Acta Derm Venereol. 1981;61(4):344-346.
- 22. Kavli G, Stenvold SE, Vandbakk O. Low prevalence of psoriasis in Norwegian Lapps. Acta Derm Venereol. 1985;65(3):262-263.
- Koo J. Population-based epidemiologic study of psoriasis with emphasis on quality of life assessment. Dermatol Clin. 1996;14(3):485-496.
- 24. Gelfand JM, Feldman SR, Stern RS, Thomas J, Rolstad T, Margolis DJ. Determinants of quality of life in patients with psoriasis: a study from the US population. J Am Acad Dermatol. 2004;51(5):704-708.
- 25. Facchini FS, Hollenbeck CB, Jeppesen J, Chen YD, Reaven GM. Insulin resistance and cigarette smoking. Lancet. 1992;339(8802):1128-1130.
- 26. Festa A, D'Agostino RJ Jr, Howard G, Mykkänen L, Tracy RP, Haffner SM. Chronic subclinical inflammation as part of the insulin resistance syndrome: the Insulin Resistance Atherosclerosis Study (IRAS). Circulation. 2000;102(1):42-47.
- 27. Manson JE, Ajani UA, Liu S, Nathan DM, Hennekens CH. A prospective study of cigarette smoking and the incidence of diabetes mellitus among US male physicians. Am J Med. 2000;109(7):538-542.
- 28. Chou HH, Hsu LA, Liu CJ, Teng MS, Wu S, Ko YL. Insulin resistance is associated with C-reactive protein independent of abdominal obesity in nondiabetic Taiwanese. Metabolism. 2010;59(6):824-830.
- 29. Mehta NN, Azfar RS, Shin DB, Neimann AL, Troxel AB, Gelfand JM. Patients with severe psoriasis are at increased risk of cardiovascular mortality: cohort study using the General Practice Research Database. Eur Heart J. 2010;31(8):1000-
- 30. Tobin AM, Veale DJ, Fitzgerald O, et al. Cardiovascular disease and risk factors in patients with psoriasis and psoriatic arthritis. J Rheumatol. 2010;37(7):1386-
- 31. Gelfand JM, Neimann AL, Shin DB, Wang X, Margolis DJ, Troxel AB. Risk of myo-

- cardial infarction in patients with psoriasis. JAMA. 2006;296(14):1735-
- 32. Gelfand JM, Troxel AB, Lewis JD, et al. The risk of mortality in patients with psoriasis: results from a population-based study. Arch Dermatol. 2007;143(12):
- 33. Ford ES. Risks for all-cause mortality, cardiovascular disease, and diabetes associated with the metabolic syndrome: a summary of the evidence. Diabetes Care. 2005;28(7):1769-1778
- 34. Sowers JR. Obesity as a cardiovascular risk factor. Am J Med. 2003;115(suppl 8A):37S-41S
- 35. Gisondi P, Del Giglio M, Di Francesco V, Zamboni M, Girolomoni G. Weight loss improves the response of obese patients with moderate-to-severe chronic plaque psoriasis to low-dose cyclosporine therapy: a randomized, controlled, investigatorblinded clinical trial. Am J Clin Nutr. 2008;88(5):1242-1247.
- 36. Higa-Sansone G, Szomstein S, Soto F, Brasecsco O, Cohen C, Rosenthal RJ. Psoriasis remission after laparoscopic Roux-en-Y gastric bypass for morbid obesity. Obes Surg. 2004;14(8):1132-1134.
- 37. Marra M, Campanati A, Testa R, et al. Effect of etanercept on insulin sensitivity in nine patients with psoriasis. Int J Immunopathol Pharmacol. 2007;20(4):
- 38. Martínez-Abundis E, Reynoso-von Drateln C, Hernández-Salazar E, González-Ortiz M. Effect of etanercept on insulin secretion and insulin sensitivity in a randomized trial with psoriatic patients at risk for developing type 2 diabetes mellitus. Arch Dermatol Res. 2007;299(9):461-465.
- 39. Prey S, Paul C, Bronsard V, et al. Cardiovascular risk factors in patients with plaque psoriasis: a systematic review of epidemiological studies. J Eur Acad Dermatol Venereol. 2010;24(suppl 2):23-30.
- 40. Gisondi P, Cotena C, Tessari G, Girolomoni G. Anti-tumour necrosis factor-alpha therapy increases body weight in patients with chronic plaque psoriasis: a retrospective cohort study. J Eur Acad Dermatol Venereol. 2008;22(3):341-344.
- 41. Saraceno R. Schipani C. Mazzotta A. et al. Effect of anti-tumor necrosis factoralpha therapies on body mass index in patients with psoriasis. Pharmacol Res. 2008;57(4):290-295.

PRACTICE GAPS

Lack of Appropriate Screening for the Metabolic Syndrome in Patients With Psoriasis Risks **Underrecognition and Undertreatment** of Important Comorbidities

ecent advances have solidified our understanding that psoriasis is an important systemic inflammatory disease. Specifically, characterization of the inflammatory cells and the cytokine milieu, as well as an appreciation of increased cardiovascular risk factors, vascular disease, and mortality, has been profound. In this issue of the Archives, Love and colleagues remind us of the presence of these important cardiovascular risk factors, some of which cluster as the so-called metabolic syndrome. They estimate that nearly 2.7 million adults with psoriasis in the United States have the metabolic syndrome, representing a unique challenge and an opportunity.

Although dermatology researchers have led these advances, there are significant barriers to the incorporation of this knowledge into daily practice. First, physicians must be active learners who give careful attention to the evidence in the literature. The relationship between psoriasis and cardiovascular risk factors has be-

come a particularly hot topic for several years, so, while the average dermatologist is conversant with this topic, it is the unusual dermatologist who has acted on it. To bridge this potential gap, educational programs should be developed aimed at affecting patient care through courses and continuing medical education at local or national meetings. Some such programs do exist; eg, a consensus statement that provides guidance with regard to comorbidities and screening guidelines has been released by the National Psoriasis Foundation.¹

Practice Gaps Poll results available at www.archdermatol.com

On a practical level, many dermatologists, even those who are well versed, may be uncomfortable or uncertain how to screen for the individual components of the metabolic syndrome. Although dermatology has its earliest roots in internal medicine, specialization has separated dermatologists from issues related to general practice. To simplify this issue, a pocket card or electronic template can be created to include the diagnostic criteria for the metabolic syndrome in an easy-to-read and easyto-use format, as defined by the revised National Cholesterol Education Program Adult Treatment Panel III. Moreover, these diagnostic criteria can be easily categorized into (1) basic vital signs/examination and (2) basic laboratory tests. Patients can have their blood pressure, height, weight, and abdominal circumference measured by a nurse, medical assistant, or other health care provider at the initial office visit. Providers can order basic fasting laboratory evaluation, including a lipid profile and blood glucose level. While medical management and treatment for obesity, dyslipidemia, and high blood pressure may beyond the purview of dermatologic care, dermatologists may be the only physicians who are seeing these patients and therefore the only providers with the opportunity to screen these at-risk patients to allow early identification and earlier intervention for their modifiable risk factors. Furthermore, patients with the metabolic syndrome may exhibit features of atherogenic dyslipidemia prior to the onset of overt glycemia and clinical diagnosis of diabetes, so timely intervention may modify the disease process, allow better control, and prevent long-term complications.2 Close collaboration with generalists and other specialists (eg, cardiologists, endocrinologists) will provide comprehensive and complete care for this high-risk population.

As physicians, we provide patients with counseling and

education regarding the clinical features, pathogenesis, complications, and treatment of their psoriasis. By incorporating this simple screening into routine practice, dermatologists will become more efficient in their clinical assessment and can reinforce the importance of these factors to patients. If patients can better understand the complex relationship between their psoriasis and other health issues, they may be more inclined to make behavioral modifications and lifestyle changes. Also, they may even be more adherent to treatment for their psoriasis and their other medical conditions.

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- Kimball AB, Gladman D, Gelfand JM, et al; National Psoriasis Foundation. National Psoriasis Foundation clinical consensus on psoriasis comorbidities and recommendations for screening. J Am Acad Dermatol. 2008;58(6):1031-1042
- Cannon CP. Mixed dyslipidemia, metabolic syndrome, diabetes mellitus, and cardiovascular disease: clinical implications. Am J Cardiol. 2008;102(12A): 51-9L.

Announcement

Dermatologic Photography Tips: Take Great Publishable Images

Tip: Obtain proper written consent to publish the image if any patient identifiable information is in the picture, such as a unique tattoo. If in doubt, obtain consent. Consent forms are available at http://www.archdermatol.com. Use of black bars over the eyes of a patient is not acceptable to mask the identity of a patient. ²

Have a great tip? Send it by e-mail to ashish@derm.md.

- 1. Bhatia AC. The clinical image: archiving clinical processes and an entire specialty. *Arch Dermatol.* 2006;142(1):96-98.
- Iverson C, Flanagin A, Fontanarosa PB, et al. American Medical Association Manual of Style. 9th ed. Baltimore, MD: Williams & Wilkins; 1998:141.