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EDITOR'S CORNER

New Data on Peripheral Arterial Disease Prevalence in the United States

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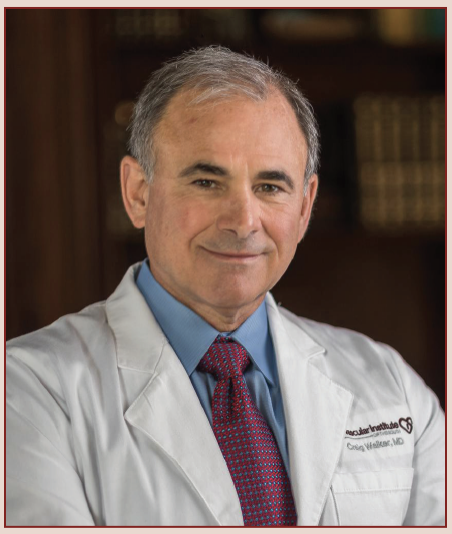

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Hello and welcome to the April 2023 issue of *Vascular Disease Management.* This is an issue that is of extreme importance to all health care providers engaged in providing cardiovascular diagnosis and treatment. In her article "The Current U.S. Prevalence of Peripheral Arterial Disease," Mary Yost provides updated estimates of the previously reported prevalence of lower extremity peripheral arterial disease (PAD) that had originally been reported using the diabetes method, Criqui/PARTNERS method, and NHANES data approximately 25 years ago. Prior estimates under-represented minorities and women. These earlier estimates of disease prevalence are obviously outdated and do not reflect the dramatically increased population of the United States, the increased incidence of diabetes mellitus that is also being reported at younger ages, the increased population of minorities such as Blacks and Hispanics who are known to have a higher prevalence of PAD, and the aging of the U.S. population, with octogenarians representing the fastest-growing age group. Obviously, no estimates have been able to evaluate the large group of undocumented individuals living in the United States.

PAD prevalence is known to be most closely related to advanced age, diabetes mellitus, and smoking. A more current evaluation of the true prevalence of this common disease is crucial if we are to improve outcomes with earlier disease detection, preventive programs, exercise programs, and targeted treatment algorithms. It is important to project associated health care costs. PAD has been established as a marker not just for leg symptoms and amputation, but as a major risk factor for cardiovascular death. Early detection and treatment have the potential to improve outcomes above and beyond the legs, and to lessen the profound societal health costs and disabilities associated with atherosclerotic diseases.

Studies to evaluate the prevalence of disease are time-consuming and expensive to conduct. Mary Yost has ingeniously extrapolated disease prevalence from prior study methods and has adjusted this to today's population and the present reported incidence of diabetes. Utilizing her method, she estimates the prevalence of PAD to be approximately 21 to 26 million in the United States rather than the currently quoted 8 to 12 million based on the older landmark studies. This newer estimate has certain limitations, including lack of assessment of disease in those under age 40, inability to document how long a patient has diabetes (which is being reported in progressively younger groups, including teenagers), inability to fully interrogate all minorities living in the United States where disease prevalence is known to be greater, inability to include the growing population of chronic renal failure patients who are living longer on dialysis, and the ability to adjust for decreased incidence of overall smoking but increased incidence in young women. There are other potential limitations not listed.

Despite the limitations I have listed, Mary Yost's estimates are unequivocally more reflective of the prevalence of the PAD disease state in the United States today than the older quoted studies. Her use of common sense and simple extrapolation, coupled with logic, have yielded updated usable data without repeating tedious, expensive studies that are time-consuming and that can only determine estimates of prevalence as well. The only "gold standard" that would be accurate would require screening of every U.S. adult, which is impractical as even screening studies such as ankle-brachial index can miss critical PAD, and the cost of screening would be massive.

PAD is highly prevalent and is associated with profound cost, morbidity, and mortality. It may be the only clue to underlying cardiovascular disorders such as coronary, carotid, mesenteric, renal, and aneurysmal forms of atherosclerosis. PAD affects many treatment options and limits optimal exercise treatment options. Understanding the profound prevalence of this disease process gives credence to stressing the importance of evaluating distal foot pulses and linking findings of PAD to other systemic disorders. We must create better public PAD awareness and education to include all health care providers.

PAD must assume its status as one of the most important disease processes in the world. It necessitates better screening, dedicated longitudinal follow-up, and treatment. Mary Yost's article is one major step in better understanding this important disease.