Editor’s Note: This Special Communication is part of a collection of articles commemorating the APMA-SVS alliance. Companion papers can be read at https://doi.org/10.7547/20-217, https://doi.org/10.7547/20-165, https://doi.org/10.7547/19-175, and https://doi.org/10.7547/20-137.
SPECIAL COMMUNICATION

The Offspring of Sisyphus: Steady Progress in The Decade Since the “Toe and Flow” JAPMA-JVS Special Issue on Limb Preservation

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Ten years ago, we described the broad fragmentation of medical care, specifically as it related to the prevention of unnecessary amputations and the need to build limb preservation teams.¹

We alluded to the solitude of Sisyphus, the tragic, mythical, pre-Homeric figure relegated to rolling a stone up a hill in Hades only to have it tumble back upon him. Over the past decade, that burden has expanded worldwide²-³. Indeed, lower extremity complications associated with
diabetes now constitute a top 10 condition in the World Health Organization’s Global Burden of Disease and Disability.\textsuperscript{3,4} Five-year mortality associated with diabetes-related complications continues to rival all but the most aggressive forms of cancer.\textsuperscript{3} Some of us taking care of the diabetic foot, toiling in isolation, felt that limb salvage had become a similarly Sisyphean task, leading us to take a step back and ask: What if Sisyphus were to have a dedicated partner? This unique Journal of the American Podiatric Medical Association and Journal of Vascular Surgery joint issue focusing on the team approach to limb preservation was published in 2010. That issue consisted of 14 manuscripts from more than two dozen collaborating centers around the world (Figure 1) and highlighted the profound interdisciplinary nature of limb preservation.

“Podiatry and vascular surgery are natural allies in the struggle against amputation. Last year, leaders of the Society for Vascular Surgery (SVS) and the American Podiatric Medical Association (APMA) met and agreed to begin the development of integrated programs to improve care for diabetic foot problems. This special joint diabetic foot issue is an early result of this collaboration, and the editors hope it catalyzes a sustained, synergistic relationship between our specialties.”\textsuperscript{1}

The effort was borne of a first-ever meeting between the two parent organizations, the American Podiatric Medical Association (APMA) and Society for Vascular Surgery (SVS) in Tucson, Arizona (Figure 2). It was a reflection of the successes that we and others found in integrated “Toe And Flow” units that integrated the perspectives and strengths of podiatric
surgery and vascular surgery.

Indeed, a catalytic reaction occurred. Globally, there are now hundreds of successful interdisciplinary teams in academic and community settings, as well as dozens in the USA, alone.\textsuperscript{5-9} An effective workable structure to these centers has also begun to take shape, focusing on skill-sets and aptitude.\textsuperscript{5-9,10,11}

Of course, development of interdisciplinary centers mandates the adoption of a mutually understood, common-language that can co-evolve with the team. The past generation had seen co-evolution of classification systems for tissue loss and for vascular disease without optimal translation.\textsuperscript{12,16} Toe and Flow specialists were isolated by their own separate languages, and communication was often garbled and confused. This led to development of a threatened limb classification system for patients with chronic limb-threatening ischemia (CLTI), including those with diabetic foot wounds, known as Wound, Ischemia of Foot Infection (WIFi).\textsuperscript{17,18} This system has since been widely adopted by the SVS, the APMA, the ESVS, and multiple guidelines and societies across the world.\textsuperscript{19} WIFi effectively stratifies the degree of limb threat, predicts one-year amputation risk and other important clinical endpoints, and helps direct the need for revascularization. While correctly assessing Ischemia in WIFi requires non-invasive vascular studies such as toe waveforms and pressures, this can be done either immediately in an office setting or from a nearby vascular lab. Ideally, it is done as part of a collaborative “Toe and Flow” limb salvage team. Beyond WIFi, the Global
Guidelines add an updated patient risk assessment and mortality prediction tool as well as a vascular anatomic staging to the care of patients with CLTI, a condition that represents a spectrum of risk to the patient and his/her limb. Assessing the patient, his or her limb, and the anatomy are the three components of a Venn diagram needed to prioritize and direct appropriate and effective limb salvage efforts.

The nascence of limb salvage teams and an understanding begun with the adoption of a common language has now led to the creation of the Global Vascular Guidelines (GVG)²⁰. Reprinted in this issue, these guidelines constitute a truly global group of experts from multiple specialties focused on measuring as well as managing this complex condition in an effort to better frame and deliver care.

The past decade has emphatically demonstrated that we, like Sisyphus, were never really alone (Figure 3). We’ve always had supportive siblings. Our goal continues to be pushing together, in concert, to help our patients move through their world a little better.

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Figure 1. The Cover of the Joint SVS APMA Issue on Limb Preservation, 2010. Used with permission from Elsevier.
Figure 2. 2009 Tucson SALSA Summit including (from L): Dr. Glenn Gastwirth (APMA Executive Director), Prof. David G. Armstrong (SALSA@UoA, now at USC), Dr. Ross Taubman (APMA President), Prof. G. Patrick Clagett (SVS President), Rebecca Maron (SVS Executive Director), Prof. Joseph L Mills (SALSA@UofA, now at BCM), Dr. George Andros (co-Founder, DFCon), Wayne Zefeldt (General Manager KCI). Photo courtesy of David G. Armstrong and Joseph L. Mills, used with permission.
Figure 3. Global Vascular Guidelines Cover Photo: Sisyphus and Siblings Moving the World.

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