Commentary

Nicotinamide and Reflections on Alan Shalita and George Hambrick Jr

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A quarter century has transpired since my synagogue (Temple Beth Sholom, Cherry Hill, New Jersey) moved from its former home in Haddon Heights. In February 2014, this anniversary was celebrated with a special Sabbath service. On the way to the event, I told my wife that I had learned that Alan R. Shalita, MD, the long-standing chairman of the Department of Dermatology at SUNY Downstate Medical Center, Brooklyn, New York, had just died, as well as George W. Hambrick Jr, MD, the former director of dermatology at Johns Hopkins University, Baltimore, Maryland; the University of Cincinnati, Ohio; and Weill Cornell Medical College (formerly Cornell University Medical College), New York, New York. Before entering the synagogue, I took one last peek at my smartphone. Our program director had sent me a provisional list for the upcoming dermatology match and wanted my thoughts. Once entering the sanctuary, it is mandated that all electronic devices be turned off; it is a blessed time when one can be freed from the electronic ball-and-chain and have a few hours to enjoy prayer or simply to be alone with one's thoughts.

During the services, our dynamic rabbi asked members to think back to the transition. The rabbi at the time when the synagogue changed locations was Albert L. Lewis. He was an internationally recognized leader, serving as president of the International Rabbinical Assembly, among many other honors. Although his intellect was legion among his peers, it was his homespun humor, secular singing during services to emphasize a particular point, and devotion that fostered the growth of the congregation from 50 to more than 1000 families during his tenure. His congregants adored his unpretentious, cerebral, humane, and compelling style. When asked about remembrances, I recalled the time when my wife and I were new members of the synagogue. I received an unsolicited call from Rabbi Lewis wishing me *mazel* (luck) on my appointment as head of the Division of Dermatology at Cooper Hospital (now known as Cooper Medical School of Rowan University) in Camden, New Jersey. He gently wished for me to have the fortitude to accomplish more than I even imagined and to do so with a sense of humility and purpose. It almost felt as though I was anointed.

My mind continued to wander, thinking of Alan Shalita and George Hambrick Jr. I could not recall how I met either man, yet I had long-standing relationships with both of them. Every time Alan would see me, he would refer to me as "Mike Fisher's boy," which was a genuine compliment, as Michael Fisher, MD, is the founder and former head of the Division of Dermatology at the Albert Einstein College of Medicine in Bronx, New York, where I was a dermatology resident. Over the years, Alan would offer his perspectives on the current status of dermatologic administration in academic centers, always with warmth and a genuine interest in my career and progress. Although every dermatologist should be grateful for Alan's work on acne, our discussions of academic affairs and dermatology residencies were special.

I was glad that I did not meet George at the time I was a resident in New York in the early 1980s, as his reputation was (politely) considered as being difficult and demanding. Some years later, he introduced himself to me. I am not sure how he made the connection, but as an expert on the X-linked variant of ocular albinism (also called Nettleship-Falls ocular albinism), he was familiar with research performed by my wife, Rhonda E. Schnur, MD, who is a geneticist at Cooper Medical School of Rowan University. I was struck by his southern charm, profound knowledge, inquisitiveness, and dedication to the advancement of dermatology through his work with the American Skin Association. At national meetings, I would relish our conversations on the state of affairs of academic dermatology.

I never quite understood why these men befriended me; I can only surmise that they probably had this generosity of spirit with most of their acquaintances.

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Years ago, I read Rabbi Lewis' book *What's Your Glory!* in which he encouraged readers to find the essence of what makes them unique and how that should translate to aspirations of reaching their fullest potential. Alan and George had glorious careers that spanned decades. Aside from being administrators and leaders in organized medicine, they had major scientific contributions, predominantly in acne vulgaris (A.R.S.) and general clinical dermatology with a focus on genetic diseases, including X-linked ocular albinism and Hurler disease (G.W.H.).

Reviewing their respective publications, I realized that there might be a way to honor their legacies by combining aspects of their final publications: the potential of administering nicotinamide for recalcitrant cases of acne necrotica.

Acne necrotica demonstrates a superficial (acne necrotica miliaris) or deep variant with scars (acne varioliformis).[1] Both variants characteristically appear in adults with a slight male predominance. Acne necrotica miliaris presents with recalcitrant, waxing and waning, pruritic, pinpoint vesicopustules on the scalp that are rapidly excoriated, leaving small crusted erosions. Acne varioliformis is a relentless disorder, most frequently appreciated at the hairline on the forehead and temples, as well as on the eyebrows, nose, and cheeks. Lesions typically are pea-sized, follicular, red-brown, umbilicated papules forming adherent hemorrhagic crusts that resolve over a few weeks, leaving depressed varioliform scars. Histologically, these lesions are classified as necrotizing lymphocytic folliculitis. The etiology is unknown, though infection with *Staphylococcus aureus* and *Propionibacterium acnes* has been considered. The condition is aggravated by stress and manipulation of the lesions. Treating this condition is unrewarding, with systemic antibiotics, topical corticosteroids, and retinoids demonstrating little efficacy.[1]

To minimize bacterial resistance, an international effort is underway to urge physicians to prescribe antibiotics judiciously, which is relevant to dermatologists who routinely prescribe courses of antibiotics for the treatment of acne.[2] One of the recently studied alternatives to antibiotics is nicotinamide, an antioxidant with immunomodulatory effects. Nicotinamide, also known as niacinamide, is the pyridine-3-carboxamide form of niacin, a component of the vitamin B complex. It is the precursor for nicotinamide adenine dinucleotide and acts as an inhibitor of poly-(adenosine diphosphate–ribose) polymerase, which plays an essential role in the expression of cytokines, chemokines, and adhesion molecules via enhanced transcription of nuclear factor κB.[3] An open-label, 8-week, prospective trial of 235 patients with acne vulgaris evaluated the effects of adding an oral multivitamin containing a blend of nicotinamide and azelaic acid, zinc, copper, pyridoxine, and folic acid. A statistically significant number of patients demonstrated improvement over their prior acne regimen at 4 and 8 weeks ($P<.0001$), with 76% of patients stating that the product was at least as effective as prior treatment with oral antibiotics.[4] Recent studies have confirmed that topical formulations of nicotinamide gel have proven to be equally effective as topical clindamycin in managing acne.[5,6]

The next patient I diagnose with acne necrotica will be treated with nicotinamide rather than doxycycline. Additionally, as we submit our rank list for the dermatology match this week, I will be thinking about our future colleagues, hoping that they find their glory in our discipline, molded in the fashion of Alan and George.

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