

Foot involvement in systemic lupus erythematosus: more than joint disease?

Sirs,

We read with great interest the study published recently in *Clinical and Experimental Rheumatology* by Morales-Lozano *et al.* (1) on foot and ankle disease in people with systemic lupus erythematosus (SLE). The analysis of the results demonstrated that an association was found between reduced foot function and ultrasound lesions (1). Another important finding of this study was the involvement of the ankle joint detected by clinical and ultrasound assessments. This is of a great relevance as foot and ankle characteristics in SLE are poorly understood. Only recently has foot and ankle involvement in SLE been identified as heterogeneous in nature and appears to have a substantial negative impact on participants' mobility, quality of life and well-being (2, 3). Of note, the burden of disease in SLE has also been reported to be associated with nail, skin and vascular disease (4-6). Although Morales and colleagues (1) have reported important findings on foot and ankle joint disease, based upon our experience in the field, we would like to raise some comments that we feel are of potential interest in addressing this intriguing issue.

In an attempt to establish a better understanding of skin, nail and vascular disease we conducted a cross-sectional, observational study on 29 participants with lupus erythematosus based in Auckland, New Zealand. The majority (n=17, 59%) of participants were European females with a mean (SD) age of 56.7 (14.3) years with a disease duration of 5.2 (3.7) years. We found moderate levels of foot pain using with a mean (SD) of 37 (33) using a 100 mm visual analogue scale. Moderate levels of disability with a mean (SD) of 12 (11) using the Manchester Foot Pain and Disability Index (7) were observed. Nail pathologies were observed in 17 (59%) participants and plantar corns and callus in 14 (48%). The presence of cold feet was observed in nearly two-thirds of the participants (n=18, 62%) and chilblains in 11 participants (38%).

Nearly one-third of participants reported intermittent claudication (n=9, 31%), and nearly two-thirds reported Raynaud's phenomenon (n=18, 62%). Two participants (7%) reported previous foot ulceration and one participant (3%) reported having a current digital ulcer. The most common type of footwear were flip-flops (n=9, 31%) and sandals (n=9, 31%). These findings provide further insight into the spectrum of foot-related complications.

The assessment and management of the foot in people with SLE has been given little consideration. Assessment of the foot in SLE needs to capture not just joint disease, but also skin and vascular pathology. The lack of an assessment protocol in the context of assessing people with this complex multi-morbid pathology may mean that the opportunity for early identification and management is missed (8). Understanding the impact of the disease and foot problems is crucial in developing a suitable non-surgical management strategy (9). The aims of a management strategy is to reduce pain, maintain function and improve quality of life utilising specific interventions. These interventions may include palliative treatment for the nails and skin, prescribed foot orthoses specialised footwear, management and prevention of foot ulceration with the need for education and information in all aspects of foot health.

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