

## Dr. Erdozain, *et al* reply

To the Editor:

We thank Dr. Kawada<sup>1</sup> for his interest in our study<sup>2</sup> and acknowledge his comments, which we will try to address.

Regarding the first issue, the prevalence of ankle brachial index (ABI) > 1.4 in our cohort was low: 2.77% (6/216 patients). It is true that high ABI values, with a cutoff value ranging between 1.3 and 1.4, have been related with higher cardiovascular mortality. The Strong Heart Study found a similar association between cardiovascular mortality and both high ABI and low ABI, although this study may be biased by the fact that it was conducted in an American Indian population<sup>3</sup>. However, the evidence of cardiovascular mortality and morbidity related with low ABI is very strong, and given the number of patients with high ABI in our study, we do not think the inclusion as controls of individuals with high ABI invalidates our results.

Dr. Kawada raises his concerns about the possibility of false-positive low ABI values given the low number of symptomatic patients in our cohort. However, it is well known that, in the general population, most patients with peripheral arterial disease (PAD) are asymptomatic<sup>4</sup>, and our figures fit with these data. In fact, ABI has been developed as a screening test for PAD in asymptomatic individuals<sup>5</sup>.

We agree that our sample size was somewhat small for an extensive logistic regression analysis to be performed. Thus, only those variables with  $p$  values  $\leq 0.1$  in the univariate analysis were included in the initial model. Indeed, many of them were intimately related (age at diagnosis and at the time of the study, several cardiovascular risk factors alone or in combination). Finally, only the age at study was fully significant. However, the combination of diabetes mellitus, hypertension, hypercholesterolemia, or current smoking was borderline significant, with an OR 2.3, 95% CI 0.99–5.1,  $p = 0.053$ , which makes clinical sense.

We agree with Dr. Kawada that a more sizeable study group would help reduce CI and make the results stronger; yet, we believe that our data, despite the limitations, represent a significant contribution to the

study of this underdiagnosed condition in patients with systemic lupus erythematosus.

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## REFERENCES

1. Kawada T. Predictive factors for low ankle brachial index in patients with systemic lupus erythematosus. *J Rheumatol* 2014;41:2086.
2. Erdozain JG, Villar I, Nieto J, Ruiz-Iratorza G. Peripheral arterial disease in systemic lupus erythematosus: prevalence and risk factors. *J Rheumatol* 2014;41:310-7.
3. Resnick HE, Lindsay RS, McDermott MM, Devereux RB, Jones KL, Fabsitz RR, et al. Relationship of high and low ankle brachial index to all-cause and cardiovascular disease mortality: the Strong Heart Study. *Circulation* 2004;109:733-9.
4. Hirsch AT, Criqui MH, Treat-Jacobson D, Regensteiner JG, Creager MA, Olin JW, et al. Peripheral arterial disease detection, awareness, and treatment in primary care. *JAMA* 2001; 286:1317-24.
5. McDermott MM, Criqui MH, Liu K, Guralnik JM, Greenland P, Martin GJ, et al. Lower ankle/brachial index, as calculated by averaging the dorsalis pedis and posterior tibial arterial pressures, and association with leg functioning in peripheral arterial disease. *J Vasc Surg* 2000;32:1164-71.

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