Published in final edited form as:

Arthritis Rheumatol. 2018 July; 70(7): 1166–1167. doi:10.1002/art.40474.

Reply to Comments on the "Frequency of Chronic Joint Pain following Chikungunya Infection: A Colombian Cohort Study", the Brazilian Experience

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Dear Editor

We would like to thank Mogami et. al., for sharing their experience with chikungunya virus in the Brazilian context, especially highlighting the possible utility of ultrasound during the sub-acute phase to identify severe or evolving cases of arthritis. Indeed, Doppler ultrasound may be an effective approach to identify patients that might benefit from treatment with disease modifying agents such as methotrexate during the sub-acute phase. However, further peer-reviewed research is needed to define the role of ultrasound in the selection of patients for aggressive treatment.

In Table 1, prior co-morbidities including any type of arthritis, gout, and osteoarthritis are reported. None of these patients were excluded from the analysis. There were no significant differences in the prior co-morbidities between those with and without persistent joint pain. Evolution of diagnosed rheumatoid or psoriatic arthritis following a confirmed episode of chikungunya was not assessed. This is an astute point and will be included in our three-year follow-up.

To clarify, the definition of the initial period of infection reported in Table 2 as the "initial chikungunya virus symptom duration" represents patient-reported duration of systemic illness in days that are associated with chikungunya viral infection characterized by muscle pain, weakness, joint pain, rash, and fever. The median initial chikungunya virus symptom duration was 4 days (IQR 3–8) among all chikungunya confirmed patients.

Joint pain intensity and disability among those with persistent joint pain attributed to their chikungunya is shown in Table 3 with 27% reporting symptoms impacting capacity to continue normal activities of daily living. Furthermore, these patients report a significantly greater average of one swollen joint and three tender joints compared to those without persistent joint pain. Interestingly the global pain score in the last week ranging from 0–100

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was not significantly different between those with and without persistent joint pain attributed to chikungunya indicating a high prevalence of generalized pain among all patients with serologically confirmed chikungunya regardless of arthralgia status. Further evaluation for depression and other types of arthritis among chikungunya patients compared to controls is needed.¹

Acknowledgments

Supported by the Rheumatology Research Foundation and the NIH (National Center for Advancing Translational Sciences grants UL1-TR-001876 and KL2-TR-001877).

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