



THE IMPACT OF CHIKUNGUNYA VIRUS INFECTION ON FUNCTIONAL STATUS AND QUALITY OF LIFE

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BACKGROUND

Chikungunya virus (CHIKV) is an arbovirus transmitted by Aedes species mosquitoes. The main feature of CHIKV disease is severe polyarthralgia, which is reported in more than 90% of cases. Musculoskeletal symptoms may persist in the subacute (> 2 weeks) and chronic (> 12 weeks) phases, causing critical physical impairment and significantly impacting the quality of life of patients. The aim of this study is to assess the impact of CHIKV infection on functional status and health-related quality of life (HRQoL) after the acute phase of disease.

MATERIALS AND METHODS

Patients with confirmed diagnosis of CHIKV disease and persistent musculoskeletal symptoms after 2 weeks were referred to the Rheumatology outpatient clinic and followed up from April 2018 to May 2019. Numerical rating scales for pain, questionnaires for physical disability (Health Assessment Questionnaire-Disability Index – HAQ), as well as for HRQoL (Short-Form 12 – SF-12) were applied. The evaluations were divided into 3 stages: subacute (2 to 12 weeks), chronic from 12 to 24 weeks and chronic with more than 24 weeks. Statistical analysis was performed and it was established that the effect was statistically significant at $p < 0.05$.

RESULTS

Of the 150 patients analyzed, 78% were women, mean age 51.8 ± 15.1 years, 53.4% had some comorbidity and 54% presented a previous musculoskeletal condition (MEC). In the subacute phase (128 patients), the average pain was 7.1 ± 2.2 , mean HAQ 1.6 ± 0.6 , mean Physical Health Composite Scale (PCS) 31 ± 6 and Mental Health Composite Scale (MCS) 37 ± 9 . In this phase, a significant correlation between the presence of comorbidity, age > 60 years and higher values of HAQ was found. In the chronic phase of 12-24 weeks (65 patients), the mean pain was 5.3 ± 2 , HAQ 1.16 ± 0.5 , PCS 35 ± 7 and MCS 39 ± 9 . During this stage, women presented lower values of MCS and previous MEC was related to lower values of PCS and moderate to severe scores of HAQ. Finally, in the assessment after 24 weeks (34 patients), the mean pain was 6 ± 2.6 , HAQ 1.16 ± 0.6 , PCS 34 ± 8 , MCS 35 ± 8 and the persistence of lower PCS values was associated with the presence of previous MEC.

CONCLUSION

In this study, we demonstrated the persistent negative impact of CHIKV disease and possible variables related to more functional disability and poor quality of life.