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SJÖGREN SYNDROME ASSOCIATED WITH CHIKUNGUNYA INFECTION

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BACKGROUND

Chikungunya virus (CKV) infection is caused by an arbovirus prevalent in various parts of the world. The virus can induce autoantibodies and rheumatic diseases, such as rheumatoid arthritis and spondylarthritis. However, until now, no case of Sjögren's syndrome (SS) was described associated with CKV. The objectives were to describe the first patient with SS following CKV and to perform an analysis of molecular mimicry between SS and CKV.

CASE REPORT

We describe a 49-year-old female with polyarthralgia and a temporary rash on her trunk and arms. Her physical examination showed polyarthritis of her ankles and wrists. Serologies for CKV were interpreted as positive with IgM 6.5 (normal range < 0.8) and negative for IgG. Antinuclear antibodies were positive at a titer of 1:640 as well as anti-Ro/SS-A. The diagnosis of subacute CKV infection was determined. The Schirmer test, Bengal rose and salivary scintigraphy were positive and the diagnosis of SS was confirmed. She was treated with hydroxychloroquine, methotrexate and a single dose of betamethasone depot.

CONCLUSION

This is the first report on CKV associated with SS. Sequence analysis of the CKV proteome versus SS autoantigens showed an extensive peptide sharing between the virus and numerous SS autoantigens, thus supporting the hypothesis that autoimmune cross-reactivity might causally link CKV to SS.