

CLINICAL AND IMMUNOLOGICAL FEATURES OF LOCALIZED SCLERODERMA ASSOCIATED WITH CHRONIC EPSTEIN-BARR VIRUS INFECTION

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Heading	ORIGINAL RESEARCHES
Type of article	Scientific Article
Annotation	<p>Localized scleroderma (morphea) is a chronic autoimmune disease of connective tissue with insufficiently studied etiopathogenesis. Trigger factors for the development of this disease may be heredity, stress, trauma, previous vaccinations, insect bites, and previous viral or bacterial infections.</p> <p>Aim of the study: to determine the clinical and immunological characteristics of localized scleroderma in patients with chronic EpsteinBarr virus infection in the active and latent stages.</p> <p>Materials and methods. Thirty-eight people aged 19 to 59 with LS who were treated on an outpatient and inpatient basis during 2023–2025 were included in the study. There were significantly more women than men among the subjects-27 (71.1%) versus 11(28.9%), respectively, $p < 0.05$. The diagnosis of LS (ICD-10 code L 94.0) was established on the basis of typical clinical manifestations and formulated in accordance with the specified classification. Serological diagnosis of EBV was performed using multiplex indirect immunofluorescence (IIF) with BIOCHIP technology, which allowed simultaneous determination of IgM and IgG to all EBV antigens in a single blood serum sample from a patient and, subsequently, depending on their presence, to establish the stage of the disease. EBV DNA was determined in the blood plasma and saliva of patients using real-time PCR, using the Biocore® EBV kit from Biocore Technologies, Ukraine.</p> <p>The presence of EBV DNA in the blood and/or saliva of patients in significant amounts (103–107 copies/ml) indicated the active phase of EBV.</p> <p>Results of the study Chronic Epstein-Barr virus infection were diagnosed in all 38 patients with localized scleroderma who were examined. Based on the presence of Epstein-Barr virus DNA in serum and/or saliva in high concentrations, 44.7% of patients were found at the active phase of this viral infection, while the remaining 55.3% of patients were found to be in the latent phase of the viral infection. Patients with localized scleroderma combined with chronic active Epstein-Barr virus infection, compared with patients with localized scleroderma combined with chronic latent Epstein-Barr virus infection, significantly more often complained of itching in the areas of skin lesions; multiple small (1–5 cm) scleroderma lesions (6 or more) in the front and back of the chest; joint pain, headache, and lymphadenopathy, $p < 0.05$.</p> <p>Conclusions. There were significant differences in clinical features between patients with chronic active Epstein-Barr virus infection and patients with localized scleroderma combined with chronic latent Epstein-Barr virus infection. The clinical and immunological features of localized scleroderma combined with chronic Epstein-Barr virus infection in the active and latent phases in residents of the Ternopil region were studied for the first time.</p>
Tags	<i>localized scleroderma, chronic Epstein-Barr viral infection, active and latent phases, clinical features, indirect immunofluorescence reaction, BIOCIP technology</i>
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